

B.C. Faces the Postwar

First postwar session—Report on forests—The \$19 million fruit crop

By CHAS. L. SHAW

THIS year's session of the British Columbia legislature, which may commence sometime in February, will be an historic one if it accomplishes half the measures listed on the legislative program.

The chances are, however, that there will not be sufficient time to deal with everything; that several of the more contentious matters will be laid over for later discussion and action.

The session will begin later than usual because Premier John Hart, fortified by the pleasing result of last fall's election, wants to have some of the economic problems relating to federal-provincial relationship clarified before the law-makers get down to business in Victoria.

The Premier has already indicated that British Columbia cannot afford to go along with the proposals submitted to the first conference of premiers last year; that he cannot subscribe to a plan whereby the province would yield most of its taxing powers to Ottawa in return for grants that definitely do not compensate for the diversion of provincial funds or enable the B.C. government to proceed with its peacetime program.

The legislature may have in its hands the report of a fact-finding committee which has been exploring the possibilities of extending the Pacific Great Eastern Railway, the government owned line that runs from Squamish at the south to Quesnel at the north. It will be interesting to see what the committee recommends. A member of the Hart cabinet recently announced that the committee would urge immediate extension of the railroad into the Peace River country, but whether this would be financed by the provincial government or one of the Canadian trans-continental railway systems or an independent group of capitalists has yet to be determined. The best guess at the moment is that the provincial government will at least start the project itself; it has already financed construction of a highway from Prince George to Dawson Creek, so the railway would merely reinforce the government's transportation facilities with the promising Peace River country.

Report on B.C. Forests

Almost everyone seems agreed that Chief Justice Gordon Sloan made an excellent job of his report on British Columbia's forest problems. His report, which may provide a framework for forest administration for the next 25 years or more, was presented to the government a few days ago and it's just possible that the legislature will implement some of its recommendations at the 1946 session, although it hardly seems likely that there will be time.

The most important recommendation of Chief Justice Sloan is that an all-powerful independent commission should be set up to manage the forests, run the forest service, collect the forest revenues and carry out a long-term program designed to perpetuate the industry.

Although some members of the government are said to be critical of the commission form of administration and believe that the forest service should be directly under the wing of the cabinet, the chief justice is convinced that any alternative plan would fail to accomplish the objectives set. "Without a commission," he says in his report, "it will be impossible to change over from our present system of forest liquidation and depletion to one of sustained yield management."

And he adds: "We must, in dealing with this problem, project our perspective over the long periods it takes to grow and harvest forest crops. We are



called upon to plan, not for today nor for tomorrow, but for generations ahead."

In addition to appointment of a commission, Chief Justice Sloan advocates greater expenditure on protection of the forest from fire, more and better forestry education and research, new methods of tenure and taxation aimed at encouraging reforestation, establishment of "working circles" where cutting will be done in strict conformity with the natural reproduction of the forest.

Of interest to the fruit growers the Sloan report refers to the shortage of box material and the desirability of yellow pine for this purpose. Boxes of yellow pine, for instance, do not warp in the orchard heat, take

nails without splitting and bear the weight of other boxes without distortion.

The difficulty is that there is a serious shortage of yellow pine due to excessive cutting. The report urges that the remaining and available yellow pine stands in Crown ownership be sold on condition that the log production of this species be allocated to the interior manufacturers of box shoo.

The poultry industry in British Columbia's coastal regions has attained such stature in recent years that more attention is being given to the problem of marketing. In the past, most of the co-operative organizations have considered they were covering their field by stressing production and education and improved methods of processing of birds in their killing plants. They did their selling through independent wholesale houses. Several co-operatives in the lower mainland are planning to sell direct to the consumer.

Fruit and Tariff Preferences

British Columbia fruit growers are becoming more and more impressed with the necessity of improving and maintaining the quality of their product as a means of gaining and holding peacetime markets.

The industry is still without advice as to how the expected scaling down of Empire tariff preferences is likely to affect the sales of British Columbia fruit and other farm produce, but one thing seems reasonably sure; the time has passed when any kind of fruit or vegetable can be sold. The market is steadily becoming more selective, and competition is active from producing regions which during the war years were hardly a factor worth serious consideration.

The British Columbia Fruit Growers Association has been holding its annual sessions in Penticton, and Sales Manager Dave McNair presented some figures there showing how the fruit business has grown during the war period. Gross sales of fruit last year were \$19 millions, about \$2 million less than the 1944 high year; but there is good reason for supposing that this year sales may reach another all-time peak, for acreage planted is unusually extensive and more labor will be available than at any time during the past five years.

The growers have been fighting for reinforcement of the marketing legislation under which they operate. The laws affecting this phase of their activity are provincial in scope, and the growers maintain that the only guarantee of stability lies in federal enactment of measures designed to strengthen central marketing. There are those who fear that unless there is some such federal support various independent elements may seize their opportunity to break prices for temporary advantage, thus weakening the whole structure of fruit selling that has been laboriously built up over the years.

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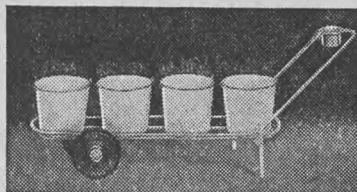
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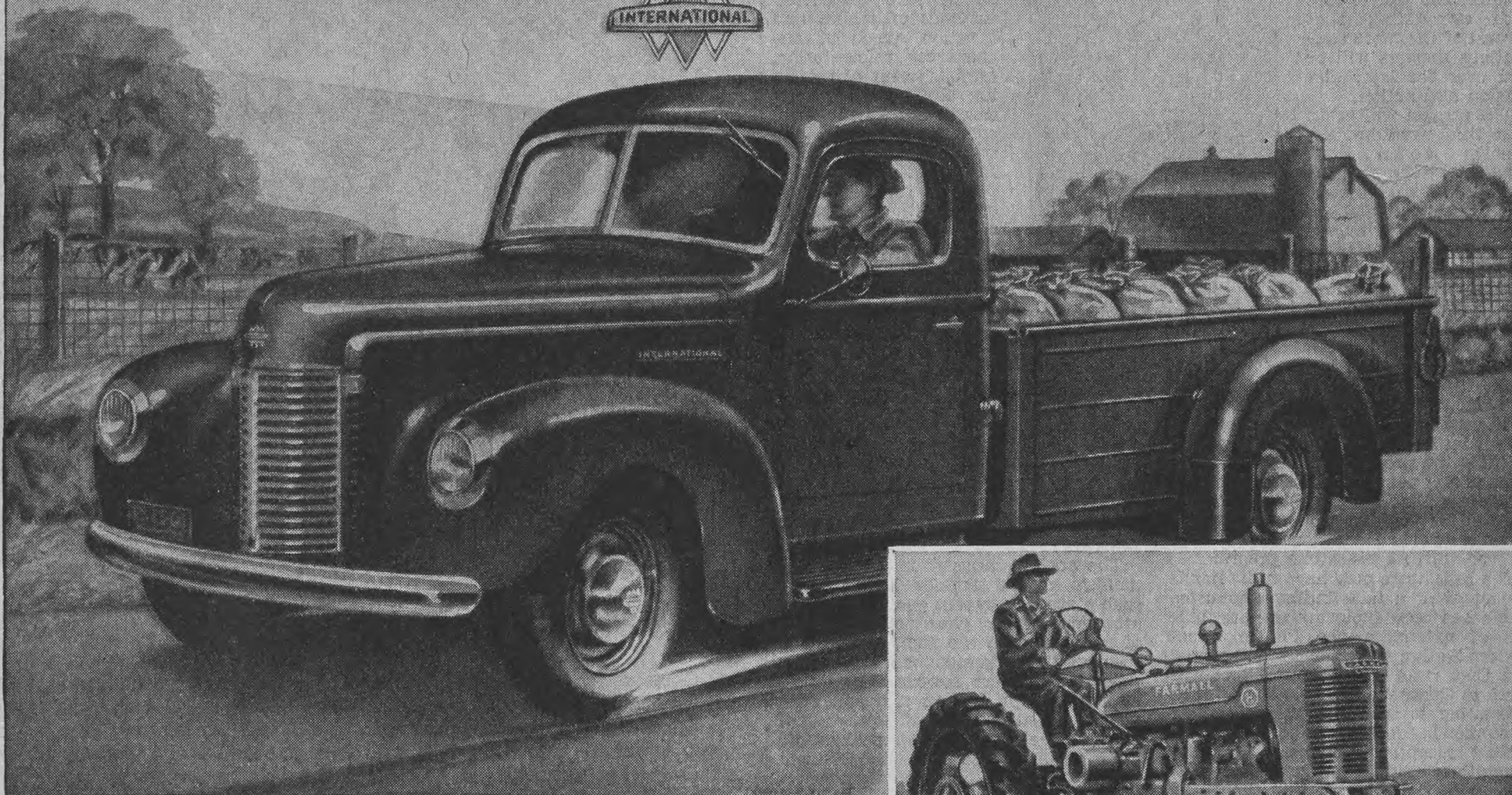
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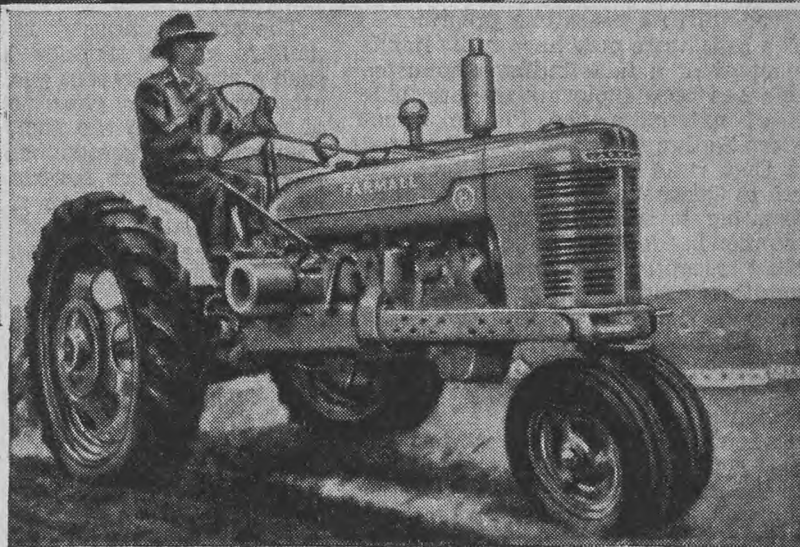


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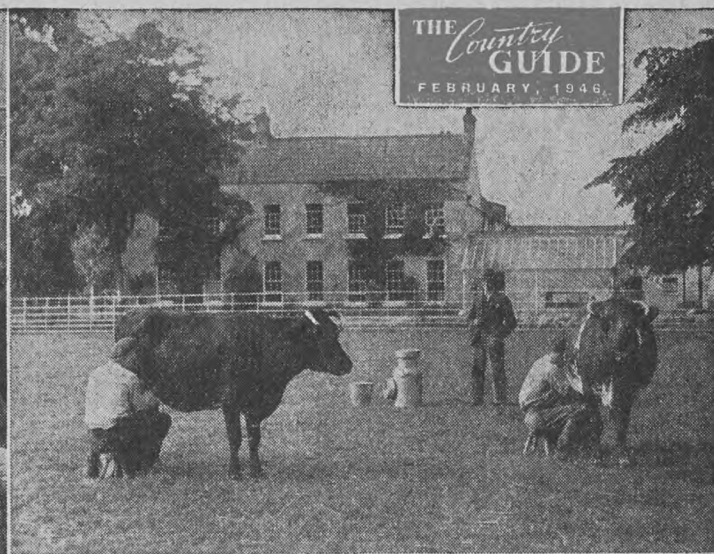
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These scenes, illustrative of various Irish agricultural scenes and activities, are from photographs supplied by The Irish Times

EIRE LOOKS FORWARD

EIRE is disturbed about the future of her agriculture. That is equivalent to saying that Eire is apprehensive about her whole domestic economy because that state has practically no natural resources other than her soil. A committee of eminent Irish economists and agriculturists has been called together to advise the government in this troubled hour and with characteristic Irish imaginativeness has produced, not one set of recommendations, but three, each leading to a different quarter of the political compass. Before looking at the difficult choices confronting Dublin let us look at the peculiarities of Irish farming and see what makes it limp.

The agriculture of Eire is the product of three factors; climate, market opportunities, and politics. With respect to the first the driest part of Ireland has about the same rainfall as the wettest part of England, distributed over some 125 wet days in the year. The more moist areas enjoy 225 wet days a year. Such a climate makes Ireland a grass country par excellence, a fact symbolized in her national colors.

A century ago, with relatively high grain prices and appallingly low labor costs, Ireland could afford to grow grain for export to Britain. The settlement of the American prairies put an end to that activity. But refrigeration was a relatively late development so that the home farmer in the British Isles could continue to exploit a growing market for livestock and livestock products. Trade opportunities combined with climate to convert Irish farmers into graziers. By 1939, 97 per cent of Eire's agricultural exports were livestock or livestock products; there were eight acres of grass for every acre under the plow; on many farms in that country not a furrow was plowed for cash crop production.

Now permanent grass farming has some undesirable features. Fertility decreases. Labor requirements are low. The capitalization per acre is less than on tilled farms. The decline of soil fertility in Eire has become so marked that a million and a half acres have gone out of use. On the farm land remaining it is estimated that an immediate application of ten million tons of lime and two and a half million tons of superphosphate, together with heavy annual applications thereafter are necessary to ensure a return to good crop yields.

A steady flight from the farm has been going on for a century all over the civilized world. In Ireland it was particularly noticeable because the switch from field crops to livestock cut labor requirements. The sight of "alien cattle" treading her fair corn lands,

moved the Irish poet to indignation not always directed by his countrymen against the true case. In other countries displaced farm labor moved cityward. As southern Ireland had no industrial cities her sons emigrated. The country had a population of over 8,000,000 at the height of its agricultural expansion. Today it is less than three million.

Ireland ruefully compares her agricultural history with that of Denmark. There are striking similarities in their limitations; both small countries with no resources save agriculture; both dependent on the British market. There is a striking divergence in their progress. Denmark's population has gone up as Ireland's has gone down. In Denmark three quarters of the land is under the plow. There is a deep rooted feeling in Eire that if she too can return to rotation farming she will experience a return to better times, that a judiciously encouraged system of tillage farming will enable her rural people to acquire the capital now so noticeably lacking.

Whereas in other countries of western Europe war has left deep scars in the body of agriculture, in Eire one finds a totally different situation. The Irish state is the only white country in the Old World living on the produce of the farm which did not become involved in the war. The government controls under which her farmers labor were launched years beforehand when Hitler was still a soap box orator and Britain was nervous about Mussolini's fighting strength. The war has added hardly a ripple to the choppy sea on which Irish agriculture had previously embarked.

For the first ten years of its life the Irish Free State was governed by Cosgrave's Fine Gael party which was fully convinced that true prosperity in their country must be based on the inescapable fact of economic interdependence with Great Britain. To them Ireland and Britain comprised one natural trading area and they studiously avoided interference with the complementary export of farm produce and import of manufactured goods across the narrow sea. To De Valera political and economic nationalism were

Impressions of Irish Agriculture, its present status and its future prospects, gained on the spot

By Col. P. M. ABEL

two sides of the same medal. He declared that Eire was going to be something more than England's kitchen garden. He lost no time in picking a quarrel with the British government, a quarrel developing into a bitter trade war in which both countries damaged each other appreciably.

Briefly the story is as follows. In 1903 the British government passed the Wyndham Act, a landmark in Irish agrarian reform. It enabled the Irish tenant farmers to buy their lands at prices which the landlords regarded as ruinously low and the tenants regarded as exorbitant, but which probably represented a fair compromise. The money was collected through a debt commission, and after the Free State was established, passed through the Irish treasury on the way to the bondholders. When the first semi-annual payment was due after De Valera's election in 1932, he announced that from that time forward payments would be discontinued.

The British immediately slapped a tariff on Irish products and exports from Ireland dropped from an average of £41 million in the previous eight years to £17 million in 1933. De Valera probably welcomed the British reaction because it enabled him to make haste with his openly declared intention to foster home industry. He retaliated with a tariff against British manufactured goods and encouraged infant industries to take root behind the protection thus afforded. This policy has been successful up to a point. Ireland now grinds her own flour, processes 75 per cent of her sugar, makes cement, and has branched out in many other lines of industrial effort.

Regard now, the incidence of this trade war on Irish agriculture!

The production of store cattle for finishing on Scottish and English farms is the most important single item in Eire's export business. It equals in value approximately as much as all other agricultural products lumped together. In 1932 the British put a tax on Irish cattle ranging from £1/10/10 for calves to £6 for three-year-old steers. At that time three-year-olds were selling at £15 a head. It was a solar plexus blow.

In order to grant some relief to distressed producers Dublin commenced the payment of subsidies on export cattle which, of course, were only a fraction of the British duty. De Valera also paid higher subsidies for cattle exported to countries other than Britain in the hope of fostering trade connections that would end complete dependence on the British market. Note that

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Weed Control Units Pay Off

By H. E. WOOD

*Manitoba Weeds Commission
Manitoba Department of Agriculture*

have held the weeds under control.

About 25 years ago, what appeared to be a new weed to Manitoba was discovered on a number of farms in the southern part of the province. It was identified as leafy spurge. Apparently some of the early Mennonite settlers who emigrated to Manitoba about 1876 brought over seed infested with this weed. Probably, too, importations of seed through trade channels, especially grass and legumes, carried the seeds of leafy spurge. In any event, the Manitoba Weeds Commission was confronted with the problem of a considerable infestation of this dangerous weed. Until the introduction of a chemical—sodium chlorate—less than 20 years ago, there was no known method of eradicating leafy spurge and the other weeds of the group. For some years previous to 1940, farmers and municipal officials were urged by the Weeds Commission to

use this chemical to stop the inroads of leafy spurge. The response was only half-hearted and the results not very encouraging.

BACK about 1937, officials of the Dominion Experimental Farm, Brandon, carried out a series of experiments in eradicating leafy spurge with Atlacide—the trade name of a product having sodium chlorate as its active ingredient. These results were immediately capitalized by the grouping together of 17 municipalities, as a weed control unit, in the Birtle-Russell area. Here the Weeds Commission, municipalities, and a number of mortgage-loan, elevator, and other companies, provided the means whereby all small and scattered patches of this weed (and field bindweed) were treated on the farms in the 17 municipalities. The results were highly satisfactory and served to point the way to a province-wide policy.

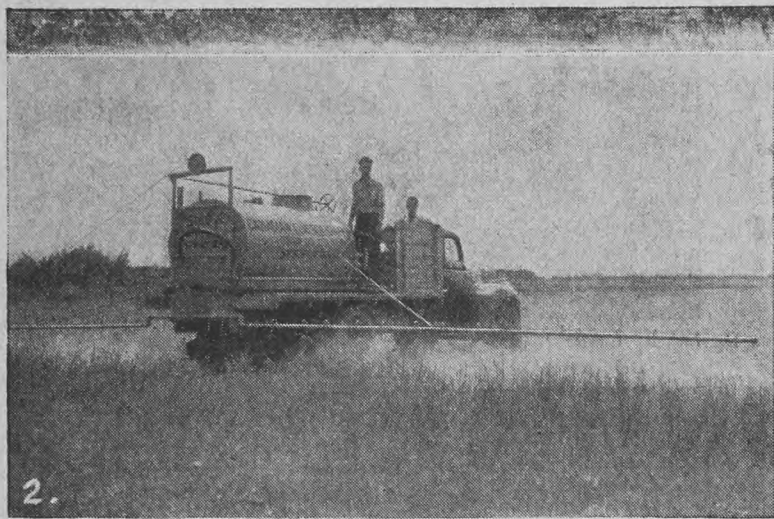
Since 1940, 15 municipal weed control units comprising 70 rural municipalities have undertaken an aggressive and continued campaign to bring this group of deep-rooted persistent perennial weeds under control and eradicate them as far as possible.

There have been three methods of attack, depending upon the extent and severity of the infestation, type of soil and other factors, as follows: 1, The application of chemicals—for small and scattered patches, fence lines, road allowances, etc.; 2, intensive cultivation—for relatively extensive infestations, on land of sufficient worth to merit the considerable financial outlay necessary; and 3, discontinue cultivation—where extensive infestations are met with on less productive sandy soils, mowing, pasturing with sheep, and seeding down are recommended.

The municipal unit plan of spraying with chemical has brought about the eradication of thousands of small and scattered patches, not to mention plenty of larger patches. A considerable number of the 1,500 farms on which patches have been treated, are now entirely freed of leafy spurge.

Each unit had its own spray rig and crew of men to go from farm to farm on which any of the four weeds had been found. Patches were treated and re-treated as necessary, at no expense to the farmer. While the government purchased chemical in carload

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2. Power outfit applying a selective spray, Sinox, to mustard-infested field in Manitoba



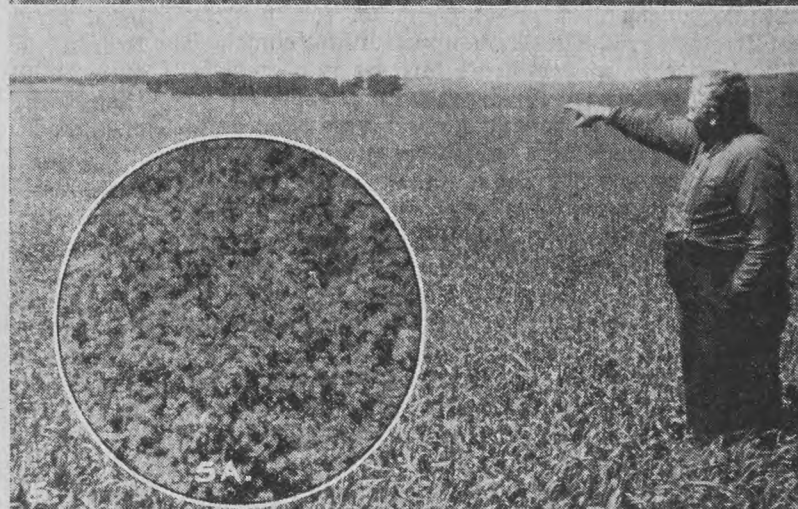
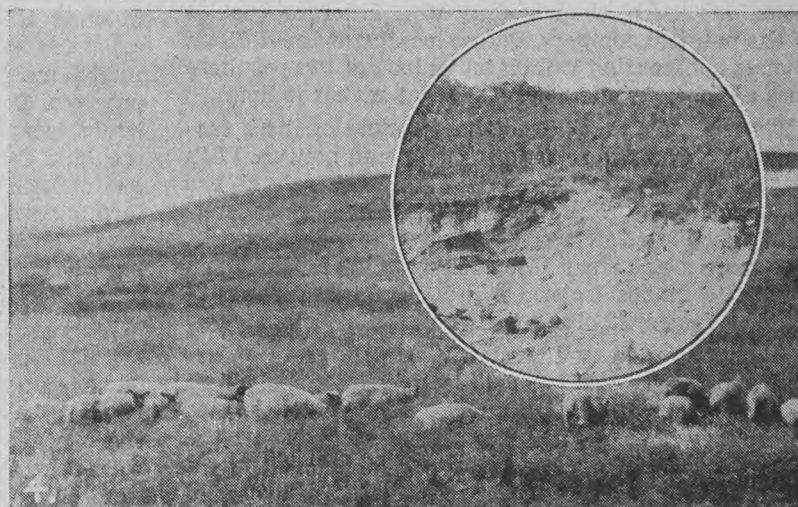
3. Mustard in bloom on an unsprayed field.

THAT weeds each year are directly responsible for enormous losses to crops of all kinds, is slowly but surely being realized by farmers and others concerned with the future of agriculture in western Canada. Since 1940, in the province of Manitoba, municipal councils, working in co-operation with the Weeds Commission of the Manitoba Department of Agriculture, have blazed a new trail in an all-out effort to bring under control, and finally eradicate, a group of weeds that threatens to ruin many thousand acres of farm lands.

At the forefront of this group of dangerous and most difficult weeds to eradicate, is leafy spurge, followed by field bindweed, hoary cress and Russian knapweed.

These weeds differ from other perennial weeds—those that live over from year to year and spread by both seed and root—in that they have root systems that penetrate many feet into the ground. The writer read of field bindweed in the State of Kansas being traced to a depth of 24½ feet, to find the next season near Coulter, Manitoba, leafy spurge roots in abundance on the floor of a newly excavated “dug-out” 12 feet down. This tremendous root system, common to these four weeds, allows any one of them to store large reserves of food in its roots and to live for many months independently of conditions above ground. All four weeds have been introduced to this continent from Eurasia, where they have long been recognized as serious weeds. However, under intensive, rather than our extensive system of agriculture, farmers in the older countries

Five years' experience by 70 Manitoba rural municipalities has justified co-operative control of leafy spurge and other serious weeds



4. Sheep like leafy spurge and are often the only means of control on unproductive sandy soils.
5. A 47-acre barley field reclaimed from heavy infestation of leafy spurge (5-A inset).—All photos: Man. Dept. of Agr.

A Stitch in Time

by

FRANK RICHARDSON PIERCE

Illustrated by
MAURICE
MACDONALD



"You're going to lose your man Jud," a voice warned. There was a taunt in it.

THE stage driver's foot pressed hard on the brake. There was a grinding of brake shoes against steel tires and the stage jerked to a stop. "Good place for a holdup," the whiskey drummer said. He yanked off his diamond stick pin and dropped it to the floor. "The Phantom Road Agent operates here sometimes."

The girl who was going to dance at The Dutchman's resort in Mesquite City peered intently through the dusty windows. She had a way with good men and bad and wasn't afraid. The big awkward young fellow who had tenderfoot written all over him twisted his big hands a moment and then allowed one hand to brush against his left side above the heart. "Another kid leaving home for the first time," the whiskey drummer thought, "and he's got his roll sewed up in his undershirt. Mothers generally start their boys out that way. Mine did."

The door opened and the whiskey drummer started to raise his hands, then he saw it was Windy Garrison, the driver. "Will a couple of you gents give me a hand with a dead man," he said. He looked hard at the tenderfoot boy. "You're a strong feller, Stubblefield, and if you expect to make your home in the West you might as well get used to a warm man before breakfast now and again."

Before Stubblefield could stir his huge bulk the smallest man aboard the stage was through the door. The driver hadn't learned his name, but he had a vaguely familiar face. He stood about five feet two inches, and couldn't have weighed more than a hundred and fifteen pounds sopping wet. He had keen, penetrating blue eyes, a strong face and brown curly hair. He wore a pair of gold mounted six guns. Windy Garrison guessed the little man was about twenty-two years old.

He pushed the driver aside, walked over and stared briefly at the dead man. "Dusted on both sides, eh?" he observed, which was one way of saying the bullet had gone completely through the victim. "Young cuss, too. Looks like a tenderfoot."

"They're always young fellows," Windy said. "Look, his coat linin' has been ripped open. The road agent was lookin' for money sewed up in his clothes."

"Do you mind if I look around?" the little man enquired.

"Sure, go ahead Mr.—, I don't think I got your name?" Windy said.

"Jud Tait," the little man answered.

"No relation to Buck Tait the sheriff of Sweet Water County?" the driver queried. "No, you couldn't be. The Tait's wearin' that brand are all big men."

"I'm the first little man in six generations," Jud Tait answered. "The Tait's are running less to quantity and more to quality," he added with spirit. There were flames in his blue eyes, as if his slight stature was a sore point with him.

"Sure, look around," Windy said hastily, "if you've got any of your old man's nose for evidence, you'll pick up suthin' or other." He scratched his head doubtfully, then added in a low confident tone, "but keep your findin's to yourself. Don't go soundin' off your knowledge to Sheriff Slade. He hates the very name, Tait."

"Why?" Jud sharply demanded. His

face flushed and his small hands clenched.

"Reg'lar gadfly, ain't you?" the driver suggested with a touch of admiration. "All set to buzz and bite. Your old man was the best sheriff this county ever had. One of the finest manhunters the Southwest has ever knowed. Slade is only fair to middlin'. When he falls down on a job somebody always says, 'Old Buck Tait would've run down the guilty man in a hurry.' Well, instead of sayin', 'Old Buck sure would,' and makin' people like him and want to help him Slade fights back. Snarls at 'em and such."

"That's bad," Jud said. He circled the area while the driver with the help of Stubblefield wrapped the dead man's remains in a blanket.

THE road agent had covered his boots with pieces of grain sacks which destroyed the nail patterns on the bottoms of his boots. He crouched near a tree, waited for his victim to pass on the road, then shot him in the back. "Always shoot 'em in the back," Jud said resentfully, "then if they live they can't identify you. Shoot 'em in the back and wait until they die before showing your face. The Phantom Road Agent is a damned coyote. Hello, here's a bit of fuzz from the killer's shirt stuck on the bark." He removed it, wrapped it in a small piece of paper and tucked the paper away in his pocket. The stage was waiting and he hurriedly boarded it.

"Find anything worth while?" Stubblefield enquired. He was nervous and shaken from handling his first man killed by a gunshot.

"It don't look as if I'd collect any rewards," Jud answered.

"Nor anybody else," Windy shouted down. "The Phantom Road Agent's got somebody in town who tips him off when there's a easy mark with money. He lets him know, too, when the sheriff's away after cattle rustlers. The coyote always strikes when the sheriff's busy. The cuss may live in town for all we know."

"Hell will be popping again," the whiskey drummer said. He turned to the dance hall girl. "They may close up The Dutchman's and freeze you out of a job," he ventured. "The women in town claim the place is headquarters for crime."

Jud Tait drew an envelope from his pocket and glanced at the address. The scrawl in his father's uncertain hand read: "Terry Mulligan proprietor The Dutchman's, Mesquite City."

Jud was still wondering what he was going into when the stage turned into the main street and the driver whipped the horses into the swift finish popular among all drivers. As it rocked to a stop a crowd gathered. "Windy's brung in another dead man," a cowpuncher yelled.

An angry woman stopped dead in her tracks and stared at the men carrying the body to the morgue. "Another one," she cried shrilly, "that's the fifth in

three months. Down with the Dutchman's—it's a breeding place for crime. It's a cesspool and a sink of iniquity. It's—"

"Shut up, Eunice," Phil Graves the coroner ordered. "Terry Mulligan's saloon has nothing to do with murders on the highway."

"Innocent boys, drunk with his vile liquor, become easy victims for the thugs who hang around there," Eunice retorted. "You're always defending Terry because he got you elected to office. Down with Terry Mulligan and his thugs." She shook her fist under the coroner's nose. "And you can't shut me up, either."

JUD TAIT gazed with misgivings on The Dutchman's. He remembered the place vaguely as a boy. His mother who was much younger than his father, had been in poor health. For that reason she had moved to the Pacific Coast while Jud was young. Nevertheless, the town was familiar, and he remembered Shultz, the original owner of the saloon, fat and genial wearing an apron and standing in front of his establishment. He wondered if the old warmth and safety were missing now.

He left his bags at the Barker House across the street, then entered The Dutchman's and asked for Terry Mulligan. Mulligan was a two hundred pound six footer, with coal black hair and Irish blue eyes. He wore expensive clothing and a loud vest. His necktie sported a

diamond horseshoe pin and the man himself smelled of fine whiskey and good cigars.

"So you're Buck Tait's cub, eh?" he observed. "Buck's the best friend I ever had and there isn't nothing I won't do for him, or his, so if you need money or want somebody murdered, Jud, just let me know." He flashed a row of fine even white teeth in a brilliant smile. Then he tore open the letter and read: Dear Terry,

About now you're wondering how a vest pocket size kid could be a son of mine. He's a queer kid, Terry. He knows all the men folks in his family are giants, but he don't think that will cramp his style none. He's all set to become sheriff of Sweet Water County as his father and grandfather was before him. Here's where you come in.

His ma and me think he'll make a fine office man—bookkeeping or something like that. In a rough and tumble fight he won't last no longer than a snowball in hell. In my time I never framed or doublecrossed a man, but for his own good we've got to frame Jud.

Sheriff Slade don't like the Tait's I hear. He'd do anything to make one of the breed look foolish. I want Jud made a deputy. I want him to be given cases he'll fail on—Slade will see to that—and after Jud's failed a few times he'll know he's made for office work and not sherriffing. It breaks my heart to do this, but it's for his own good. Thanks for anythink you can do.

Your old friend,
Buck Tait.

Jud Tait's eyes were on Terry Mulligan.
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R. J. Drysdale, Neepawa, Manitoba.—Guide photo.

Third Generation Prairie Farmers

FOR years I have known R. D. Kirkham, of Saltcoats, Saskatchewan, as one of the leading growers of registered seed in the province. For years, also, I had wanted to visit his farm, but I had never found it possible to do so until last summer.

For 58 years the Kirkham family has lived in the same district, though not always on the same farm. Mr. Kirkham's father came in 1888 from Shropshire, England, and took up his first quarter near the Lake, east of the present farmstead. The farm now consists of 1,100 acres, of which between 500 and 600 acres are cultivated. There is a considerable amount of rough land on which the cattle run.

I am always impressed by a clean and spacious prairie farm yard, where the buildings are arranged in a semi-circle facing the highway or road, and where the wide space between the house and the barn is well seeded and the grass kept fairly short and no litter of machinery, straw, piles of wood, or other disfigurements mar the pleasant cleanliness of the place. Such a farmyard I saw at the Kirkham's, with adequate but modest buildings set in the quiet of the noon hour.

I was a little earlier than I had thought to be, catching the family still at the noonday meal; but I was also fortunate, for that reason, in getting Mr. and Mrs. Kirkham and the three boys, Rupert, Sam and Bert, together for a picture. Nearly three years ago now, the sons took over the operation of the farm, though at that time Bert was a prisoner-of-war in Germany. Indeed, when I saw him, he had only been home a week. He said they had been fairly well treated and had been left pretty much to themselves, though in the winter 1944-45 food was short owing to the failure of Red Cross parcels to get through because of transportation difficulties.

Knowing that farm partnerships and working arrangements between brothers or between fathers and sons are of considerable interest, I made enquiry as to what sort of agreement had been reached, and how the division of labor was to be made among the three boys. I found that Bert having been home such a short time, there were still a great many details to be worked out among them. The farm extends for about two miles along the road, and about a mile away from the home place, Rupert and Sam were building



1. Mr. and Mrs. R. D. Kirkham, Saltcoats, Sask., and their three sons, Rupert (left), Bertrand and Sam.—Guide photo.

new houses, perhaps 100 yards apart. They were a long way from completion in late June, but now they are not only completed, but occupied. No doubt, too, some form of specialization has been worked out, that gives each of the boys his own field of responsibility. Rupert and Sam thought it would take them four years to develop good farmsteads. They were planning on fully modern houses with bathrooms and pressure systems operating from a large cistern, but they were doubtful about the prospects for electrification, owing to the cost of linking up with a power line, of which there are at present none very close at hand.

The farm grows about 500 acres of registered Thatcher wheat, first and second generation. From the crop of 1944, every bushel had been sold at \$2.25 per bushel. Mr. Kirkham, Sr., though not as vigorous or as agile as when I had last seen him, took me out to the fields and then over to the seed house, well equipped with an excellent cleaner which would take out wild oats, and also with a Carter disc machine. Since the farm has been growing good seed grain for a long time and is located in the park belt, I asked him what maximum wheat yield had been secured on the farm, and learned that yields have been secured as high as 56 bushels per acre. We also drove out to the bush pasture where the cattle were grazing, and found them grouped pretty much in the shade, since the weather was pretty warm. The herd consisted of from 20 to 25 pure-bred Shorthorns, in addition to



A likely pair of whitefaces for J. A. Paul, Okotoks, Alta.

some grades, headed by a four-year-old pure-bred purchased at the Regina sale.—H.S.F.

A Community Leader

THE Drysdale family connection is well known in Manitoba. R. J. Drysdale, of the second generation of one of the branches, farms east of Neepawa, with the traffic of No. 4 Highway pouring past his gate. It was C.P.R. land, covered with bush, when his father settled there more than 50 years ago. One of the traditions of the family concerns a tragic fire in those early days. The father was away looking for cattle. A strong, hot wind was blowing up from the south. A neighbor to the south let a fire get away and it swept through the bush, threatening the modest pioneer home. The mother put the baby in a basket and lowered it into the well, while the two boys soaked sacks in water, and kept the fire from reaching the house. But the season's increase, stored up in the wheat stacks, was a total loss.

Things have changed since the day when Mr. Drysdale's father got stuck three times in sloughs while he was getting some seed wheat from a neighbor three miles away. They don't get bogged down around those parts now. But there has always been enough moisture to produce a crop. "We've never had a failure here," said Mr. Drysdale, when I called on him one afternoon last harvest time. "We have been hailed out two or three times but the livestock stopped the

gap. We depend mostly on the stock. The herd is low now. There is a limit to the work a man can do. In the thirties we had as many as 18 milking cows, but with the countryside swept clean of available help, we had to reduce. I don't know how we have managed as well as we have."

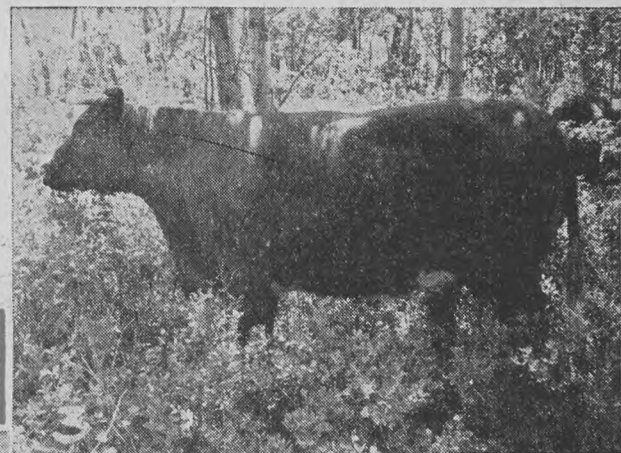
Mr. Drysdale, whom I have known for years, is a good representative of those local men who are indispensable to any community. They are right there, on the ground, pulling their weight and more than their weight, in school, church and other organized activities. The country has its governments, federal, provincial and municipal, but there, close to the lives of the people, what an enormous amount of volunteer work has to be done! If it were not done, what a social wilderness life in the country would be! Great men are honored with monuments and scholarships. Some day someone will step forward with some tangible recognition of the local men who freely and unselfishly, with no thought of remuneration and no dreams of honor, keep community activities alive and community services functioning. They serve on school and church boards. They superintend the Sunday schools. They organize picnics and social gatherings. They keep the local of the provincial farmers' organization alive. They direct the local co-operative. They preside at meetings. They get the men together to put in the crop or take it off for a sick or injured neighbor. In the aggregate, there is more work done, and more time spent in doing it, in these local community activities than in all the municipal, provincial and federal governments lumped together. And it is all freely contributed, with no charge on the public revenues. Such men—and women too—are indeed the very salt of the earth. Without them, society would simply cease to function.

One of Mr. Drysdale's activities, to which he is deeply devoted, is his work in the Laymen's Association. This organization functions in the Portage la Prairie Presbytery of the United Church. Men in the presbytery have banded themselves together to promote and supervise the work of the United Church there. With the scarcity of ministers they are prepared to take church services. For 15 years, up to two years ago, he was secretary-treasurer of the association. Now he is its president.

He has been active for years in the Arden local of the U.F.M., now called by another name, though I notice that the people still call it the U.F.M. He is president of the local co-operative and has presided at every meeting of it. Co-operation, he says, is now accepted as part of the established order of things, and is due for great expansion.

His education included the diploma course at the Manitoba Agricultural College, which he values highly. He married a town girl, and never regretted that either. The home, built 40 years ago, is modernized; and application has been made for electricity from the hydro line which now passes the gate. I came away from it more firmly convinced than ever that any young man, in line of succession to a good western farm, or who can look forward to being assisted in establishing himself on a good farm, should think twice—and three times—before considering any other vocation whatever. Farming will continue to have its ups and downs but in the long view, it offers

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A straight-topped typey female from the Kirkham Shorthorn herd.—Guide photo.



The Kirkham farmstead—Guide photo.

The Voyage of The GOLDEN HIND

The Story Thus Far:

CAPTAIN DAN HARDEGON brings the *Moon Hawk* home to Gloucester with her catch—he has skippered the dragger for one voyage to the fishing banks while her regular captain recovers from an accident—to find himself in the middle of a tense situation.

The *Golden Hind*, last topsail schooner out of Gloucester to fish by hand from dories, returns after an unlucky voyage with an almost empty hold. Her captain, JACK ROADDES, reports to the owner of the *Hind*, NORA DOONAN, whom he expects to marry, that one of his crew, JAMES CORKERY, has drowned on the Banks. The dead man's brother JOHN, also of the *Hind's* crew, blames the death on Roaddes, curses captain and ship and refuses to sail aboard her again. Hardegon, who ill conceals his own love for Nora, tries to persuade her to convert the *Hind* to power but she and Roaddes rebuff him and refuse his gift of a large-mesh manila net he has woven. Hardegon tries to tell them that such men as PARRAN, who skipper the big dragger *Doubloon* for a Boston firm, are ruining the fishing grounds with their small-mesh nets, but Nora won't heed him because she owes Parran money and must borrow more from him if her schooner is to make even one more voyage. She knows also that Roaddes wants her to sell the *Hind* to Parran.

However, Nora has an ace up her sleeve in the rotting hulk of the old *Western Star* which lies in Shelburne, Nova Scotia. There is a fortune in lead in her keel which the government needs and Nora determines to get it by hook or crook to pull herself out of the red. She enlists the aid of AMBROSE CAMERON and four other old dorymen who love the *Hind* and served aboard her under Nora's grandfather. She tells Hardegon of her plan and he persuades her to keep it secret from everyone, even Roaddes to whom she is engaged, but particularly Parran whom he knows will stop at nothing to doublecross her.

Making ready for the voyage to Shelburne, the *Hind* is berthed beside Parran's big dragger. Nora manages to borrow again from the *Doubloon's* captain but has trouble getting a crew together. John Corkery, still nursing his hate for Roaddes, goes after the *Hind's* skipper with a knife but Hardegon stops the fight and attempts to persuade Corkery to sail, offers to go dorymate with him

Men and ships alike put to the test in a fierce Atlantic drama

By EDMUND GILLIGAN

Illustrated by GORDON HICKS

if he will—a startling offer for a captain to make—but Hardegon has made up his mind he must be on the *Hind* at any cost to protect Nora. Corkery seems about to change his mind and sail when Parran intrudes to make a suggestion.

He offers to take Corkery on his own vessel in exchange for one of the *Doubloon's* crew, BILLY ATKINS, who has a none too savory reputation now, after his association with Parran, though he used to be a good fisherman. Nora is reluctant to hire the man but Hardegon realizes that it will mean getting a friend aboard the *Doubloon*, for he knows that despite Corkery's hate for Roaddes, he is essentially loyal to Nora and the *Hind*. Hardegon says he'll go dorymate with Atkins and the man comes aboard the *Hind*.

The schooner sails for Nova Scotia and after she's left port old Ambrose Cameron and his four mates, whom Nora has hidden aboard, make their appearance. Roaddes is furious with Nora for her secretive attitude and tries to pump her about her plans and why she needs five extra men and an extra dory but she heeds Hardegon's warning to tell him nothing. When they dock at Shelburne, Roaddes thinks it is just to take on bait. He goes ashore and Nora starts out, after giving Ambrose his instructions, to beard the money-shark, BANNISTER, who doesn't realize he has a fortune in the keel of the old *Western Star* that lies rotting in his yard.

With the help of old Ambrose, who pretends to be an aged multi-millionaire yachtsman wanting to buy the *Western Star* for sentimental reasons, Nora makes the purchase before Bannister knows he's been taken. The crew of the *Hind* quickly puts the ancient hulk in shape and Ambrose and the four old dorymen start to sail her back to Gloucester as the *Hind* puts out for the Grand Banks. Both Parran and Roaddes ill conceal their fury at the way Nora has made her first step to get out of debt by acquiring the *Star's* keel.

In the meantime, the LISBON, an old Portuguese doryman on the *Hind* who is completely loyal to the schooner and Nora, tells the girl of an episode in Roaddes' past. The implication is that Roaddes committed a murder and Parran is covering up for him because Roaddes owes him money. Nora, sickened by the revelation, turns more and more from Roaddes to Hardegon, the man she is beginning to realize she really loves.

PART IV

THE Gloucester dorymen say, "A sou'wester is never in debt to a no'theaster."

These gales are born in different places. That is their only difference. One is the land's gift to the sea. The other is the sea's gift to the land. Tit for tat. Riding either of them out is a bad time. The ride's the same: now high, now low, now on beam-ends, and then, perhaps, hove-down and fires out.

Yet it is arranged that these blows never change. They come and they go, always sending the same eternal signals before, always drawing them away when they depart. Blue water becomes black. Whitecaps vanish. Tide rips cease their shouting. The Atlantic changes to a flat. Sun rays pierce the greenhorn's heart and make it blithe. It is a mystery to him. To the Lisbons, who have killed cod on the Banks for four centuries, there is no mystery. The clock is wound up. Let it unwind. No change in a far-off hue escapes. A darkening sea darkens their eyes. The waning of one harshness in all the Atlantic clamor fills their hearts with stir and watchfulness. They know before the glass knows. It is only discipline, the discipline that makes men free, which sends them below to read the bill of particulars.

"She fall two-tenth since noon."

The *Hind* was plugging handsomely across Emerald Bank when the Lisbon said that to Nora and Hardegon, who were talking in the sunshine shelter between the dory-nests. He said the words calmly because he had said them

a hundred times before. He knew what to do. He passed aft and they heard him say, "No bait-up! No bait-up!"

The dorymen had already stopped their preparations. The baskets of frosty herring began to move back toward the main hatch. Knives were thrust down into bulwark sheaths. Tubs of trawl went sliding into their old places along the rails. The washing tubs were lashed again to the chains.

The watch came up out of the cabin and spoke to the helmsman. A moment later, Captain Roaddes came on deck and turned his bare, blond head this way and that. He scanned the cloudless blue. He lifted his hand. At once, the topmastmen clambered into the swifters. The main-sheet hauled down on the staysail. Soon her topsails folded. Her pace declined.

The watch changed. The man who had the helm turned it over to the new watch and, before the old took his hands off the spokes, he sang out clearly, "East-by-south. One hour!"

The new watch chanted, "East - by - south! One hour!" and looked into the binnacle to see that the course left to him was the one he must keep for his hour on duty.

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THE Country GUIDE

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Trade and Prosperity

At last the world, or most of it, is seeing the folly of impediments to trade. The lessons of lend-lease and of mutual aid have not been lost. The great Allied Nations had to integrate their resources to attain and maintain the industrial strength necessary to win the war. They recognize that they will have to do the same to attain and maintain permanent prosperity. Huge financial commitments have been made to reconstruct the economies of war devastated nations. By the Bretton Woods Agreements alone the Allied Nations are putting eighteen billion dollars into a double barrel plan of reconstruction and stabilization. But that is only part of the effort. The American loan to Britain is an additional three and three-quarter billion dollars thrown into the same general fund. Canada is providing around two billion dollars in credits, most of it to nations which need our materials but haven't, as yet, the wherewithal to pay for them. Such commitments, at the present moment exceed \$25 billion in the grand aggregate.

In these huge financial undertakings, little or nothing is heard of gold or any other form of money. The assistance extended will be in the form of goods. One point that hasn't received enough emphasis is that the countries which are now extending the credits must be prepared some time in the future to take back more goods than they will be sending out. Not only will the countries which are now getting goods on tick have to ship back goods to pay for their current imports at the time, but they will also have to ship goods to pay for the goods which are now being shipped to them. These goods will have to be admitted and in huge volume if the debts are to be paid.

No nation can shut itself up in a shell of self-sufficiency and attain prosperity in this war-wrecked world. Even Russia is finding that out and is seeking billions of credits to assist in reconstructing her vast devastated areas. These credits, if extended, would also be in the form of goods and repaid with goods, which could only mean that she is to enter the comity of nations in peace as she became a great and effective partner in the common purpose of the war. Economic nationalism had its chance to show what it could do and the results are common knowledge. It led the world straight to disaster. The disaster can be repaired only by reversing the process. The free trade argument is being won. Where speeches and editorials and treatises failed, economic pressure is triumphing. It is being won, not by rhetoric or persuasion but by the stern logic of events.

On Guard for the Farmer

One of the resolutions passed at the U.F.A. convention urged the Canadian Federation of Agriculture to organize, in the House of Commons, a farm bloc similar to that in effect at Washington. There was considerable opposition to the resolution but it passed by a vote of 74 to 49. As a matter of fact the farm bloc idea is pretty rusty from lack of use at Washington. That system of log rolling, wire pulling, back slapping and bull dozing wouldn't get the farmers anywhere at Ottawa.

It is regrettable that when the resolution came up no one was present to explain in detail how the C.F.A. works in pressing the interests of

Canadian agriculture on the attention of the federal authorities. It is much more effective and better suited to our parliamentary institutions than a farm bloc would be. Its procedure is to co-operate with the government as far as possible but to maintain at all times a vigorous and aggressive policy in the interests of the farmers of Canada. It is represented on 18 national boards and committees including the National Advisory Committee to the Minister of Agriculture, of which President Hannam is the chairman. Every year after the annual meeting the executive of the federation meets with the federal cabinet and presents the decisions of the meeting as well as a general statement of the federation's policy on matters of national concern. During the last year it made four major representations to the government. At all public hearings on pertinent questions it is represented and has a voice. The federation is in constant touch with different departments of government on matters relating to agriculture. It makes frequent statements over the air and through the press presenting the interests of the food producers as it did for example in the case of the packing plant strikes and the re-introduction of meat rationing. The farmers of this country can rest assured that their interests are being promptly and ably looked after by the Federation, from its head office within five minutes walk of the parliament buildings.

Approaching Agreement

The Dominion-Provincial conference has again adjourned. Apparently some measure of agreement was reached on the collection of personal and corporation income taxes by the federal government. The opposition to double income taxation is so strong that it would be unwise politically to resist it. One income tax act and one income tax collector for Canada is enough. Ontario and Quebec, it seems, are holding out on the inheritance tax. They want to retain the right to tax estates. Whether or not some means of distributing the money derived therefrom is under consideration has not been revealed. Certainly the outlying provinces have a claim on it. They contribute their share to the fortunes accumulated by captains of industry and officials of great national corporations. The only alternative is to keep the graduated tax on incomes so steep that the inheritance tax on great estates would be largely dried up at the source. Evidently the conference agreed on certain broad principles. It has adjourned while experts work out the necessary refinements.

Provincial Autonomy

One objection, perhaps the chief one, raised to the assumption by the federal government of wider taxation powers and administrative re-

sponsibilities is that they intrude on provincial autonomy. Is too much authority to be centralized at Ottawa? Is a unitary government to be substituted for the federal system? Are the provincial governments to become merely glorified county or municipal councils?

The most effective answer to these questions has been given by Premier Stuart Garson of Manitoba. In a letter to an Eastern paper he states:

The issue of centralization has been raised. Manitoba is quite as much opposed to centralization as any province. We agree . . . as to the superiority for Canada of a federal over a unitary system of government.

But surely this superiority, which we all take for granted, is irrelevant to the present discussion. The conference is not considering the replacing of our federal system with a unitary system. It is trying to do the very opposite. It is trying to make work effectively and justly our present federal system which for many years has been working badly. The solution is to remove its disabilities. These are not inherent. They have grown up within our federal system as a result of 78 years of evolution in Canadian political and social thought and practice. We suggest that the true friends of our federal system, the true supporters of provincial autonomy, the effective opponents of centralization, are those who seek to remove these disabilities. For there is no surer way of getting centralization and worse than to maintain the operations of our federal system in the thoroughly unsatisfactory state in which they have been during the whole of the 1920's and 1930's.

Money Must Be Provided

With the demand for more and more social services should go the realization that they cost money. Governments cannot produce money as a magician pulls a rabbit out of a hat. They raise money by taxation, or by borrowing, which is deferred taxation, and every dollar they spend must eventually come out of somebody's pocket. It would be natural to think that after a war which has already added \$10 billion to the public debt, there would be a disposition to go easy in the matter of public and private expenditures for a while. Such is the case in Britain whose austerity program is simply one of economizing. In Canada, no such disposition is apparent. The only check on expenditures is a scarcity of goods and as soon as they are available it will be the green light and no speed limit while the money lasts.

As far as the federal government is concerned, the bald statistics of the case are easily understood. In the fiscal year ending March 31 last, the total expenditures were \$5,322,718,000. Of this



CLEARING THE ROAD.

amount \$2,557,236,000 was borrowed. The total of all revenues was \$2,591,811,000. Of this, income taxes accounted for \$1,151,757,000, or almost 50 per cent.

Now the country is entering on a period of postwar financing. The prewar budget called for about \$500,000,000 a year. The postwar budget, after everything has settled down to peacetime conditions is likely to run close to two billion dollars, if all the projected social security plans are put into operation. Since borrowing must stop, the money will have to be raised annually by taxation. The greatest reduction that can be looked for, therefore, is around \$700 or \$800 million, roughly 25 per cent. The last budget provided for a reduction of 16 per cent in the income tax pending an appraisal of the tax situation, in the light of normal postwar conditions. Summing it all up then, no great relief in taxation is in prospect. It would be asking too much of Mr. Ilsley or any other finance minister to provide for a reduction of more than 25 or 30 per cent of the sum total of all taxes collected in the peak year of war expenditures. This is not a knock for plans of social security. It is just a reminder that the money which they cost will have to be forked out.

Atomization

While the allied nations are slowly and tediously weaving the pattern of the postwar world, the scientists are not allowing them to forget that it could be atomized by the potencies of the big bomb. The atomic bombs which fell on Japan are even now obsolete and are as damp squibs compared with what science could eventually accomplish in developing an annihilating explosive force. The bombs could be applied in various ways besides being dropped from airplanes. For one thing the rocket principle might be improved until they could be hurled across oceans. But more sinister methods would be at the disposal of evil men and the phenomenon of Hitler has shown that such men can arise in our day. It has been pointed out that several bombs could be secretly smuggled into a great capital like London or Washington and at a prearranged time, they could be exploded simultaneously. Instantly the entire personnel of the government, the civil service and the high military, naval and air officers, together with their plans for the nation's defense would be completely obliterated. Furthermore this might be repeated in several cities. A second, third or even fourth rate power might inflict irreparable devastation in a country as large and populous as the United States.

Einstein has estimated that a world atomic war would probably destroy one-half to two-thirds of the human race, but that enough intellectuals and books would escape to enable the remainder to rebuild civilization. They might even build a civilization that had sense enough not to destroy itself.

But this civilization need not be destroyed. It is evident, however, that the United Nations charter, evolved at Dumbarton Oaks and San Francisco in pre-atomic days, requires drastic revision. All the nations of the world will have to be either brought within the world organization or vigorously policed, as is now being done with Germany and Japan. It is also plain that the veto power by any one nation on the securities council of the U.N.O. will eventually have to go. The democratic principle of majority or two-thirds rule will have to be established. It was not established in San Francisco. Virtually all the steps taken by the Security Council are to be made on the basis of Great Power unanimity. If one power wishes, for example, to block measures for the adequate control of the atomic bomb, it would have the constitutional right under the charter to do so. This must be changed. The world cannot free itself absolutely from the danger of war, but it can provide further safeguards against it. It should at least be made unconstitutional for one nation to thwart the will of all the other nations represented on the Council.

Under the PEACE TOWER

LUCKY is the newspaperman to meet two such interesting people as Rt. Hon. Herbert Morrison, Deputy Prime Minister of Britain, and General Dwight Eisenhower, within a week. Both great men, they are a study in contrasts. Both however, cannot help revealing their ability, and both have an extraordinarily acute sense of press relations.

Rt. Hon. Mr. Morrison came first. He arrived on a special car from Halifax, and this writer went down to the Union Station to see him. An old hand at climbing aboard trains and grabbing celebrities, I have long since found that if you get into the man's private car before the Big Shots get hold of him, you do much better. Once the formalities start, the interview is usually over.

Bursting in out of a snow storm, your correspondent found Mr. Morrison bundled up in a borrowed fur coat. Later, it turned out that this sumptuous bit of haberdashery had been lent him by a solicitous member of the Canadian High Commissioner's office in London, Campbell Moodie. (He was afraid that Morrison's own overcoat wasn't warm enough for Canada.)

Mr. Morrison is short, and at first glance, not impressive. Almost indifferent to clothes, and nearly as indifferent to barbers, his light hair came over his ears a bit. Having sight in only one eye, you are apt to notice its lively lights just as much as the other one, perpetually shut.

However, all these exterior considerations fade when he begins to talk. He talks freely, easily, and will answer almost any question. If you pop one at him he doesn't want to handle, he sidesteps it neatly. There was only one other reporter present, and he and I thus had Morrison all to ourselves for quite a while.

Finally, after we had got about a column of news out of him, he said: "Wait a minute; let's have no more questions, or I won't have any speech left."

But he kept on answering questions as long as we asked them. That's the kind of a man he is. The interview was going on now, but the speech was something he would make when he got round to it. If we stole some ammunition now he'd have to make more in time for his speech.

It was about then that Prime Minister Mackenzie King burst into the car, flanked by Rt. Hon. Malcolm Macdonald, His Majesty's High Commissioner for the United Kingdom. Mr. King welcomed Mr. Morrison as an old friend, and then these three men, big nationally, big internationally, and bigger still in their fur coats, all sat down on one small sofa. Prime Minister King waved his old fur cap around. His coon coat fell open, revealing dinner dress. In rare good humor, he said, at one time during the interview:

"Why Herbert, I knew you in short pants." Then the prime minister held out his hand to indicate a small boy.

Then Mr. King said he had heard it years ago from an old friend in Britain, that Herbert Morrison would some day be prime minister of Britain.

"I never wanted to be prime minister," said the Hon. Herbert, "I just wanted to get on with the drains."

With all the wisecracking back and forth, it was hard to realize that these were three of the really big men in the Empire. They might well have been three rollicking commercial travellers on a night out.

The last time I saw Mr. Morrison was at the Canadian Club. When he stuck to his written text, he was good. But when he laid it down and spoke impromptu, he was a power house.

Apprehension has been expressed about the quality of the leaders in Britain's labor government. If they've got many more like Herbert Morrison, the Mother of Parliaments is in good hands.

FIVE-STAR General Eisenhower is as refreshing as the prairie breeze from whence he comes. Texas-born, Kansas-raised Ike is your idea of what a real soldier ought to be like. Taller than you think, husky but not fat, he commands the room when he comes in. The Press Gallery met him first in historic Room Sixteen of the House of Commons, where the frieze of crows has looked down on such celebrities as Madam

Chiang Kai-Shek, President Eduard Benes of Czechoslovakia; Rt. Hon. Anthony Eden, General DeGaulle, and (former) King Peter of Yugoslavia.

He strode into the room, accompanied by His Excellency the American Ambassador, Hon. Ray Atherton, enough brass to start a foundry, a kilted Canadian attache, the striped-panted speaker, Hon. Gaspard Fauteux, and the inevitable Mackenzie King. Standing beside him as grim custodian was a Mounted Police corporal, who had to keep his fur hat on during the whole interview.

Eisenhower has a mobile face, that lights up quickly, that breaks into a glad smile, and around which most of the time hovers the ghost of a grin. But when he is serious, he looks as black as a Kansas tornado.

ONE of the things that stood out, as far as myself as a newspaperman is concerned, was his intimate knowledge of the workings of the press. For instance, when asked about the various "incidents" reputed to be taking place between the four military administrations running Germany in general, and Berlin in particular, General Eisenhower quickly pointed out that isolated incidents, though unimportant, "made news." But constructive developments did not, and so were not reported. There was no reproach in all this. Most Brass Hats would have found fault with the press. But he had long since recognized that the public liked to read about the trouble, rarely bothered to peruse a column about dry achievements.

He had a great sense of humor, and when he told a story on himself about wondering what that Scottish regiment was doing with the Canadians, while Canadian officers present blew their top, he said: "I was so dumb I didn't realize you had Scottish regiments in Canada."

"Which one was it?" I asked.

"The Camerons," he answered.

"Winnipeg or Ottawa?" I countered.

Here Eisenhower said he didn't know, threw up his hands in surrender, burst out laughing, and the newsmen present dissolved in chuckles. Perhaps it doesn't read as amusingly as it sounded at the time, but it indicated another Eisenhower gesture.

Morris McDougall, near septuagenarian, bachelor newspaperman and beloved personality, rose and asked a question something like this: "On a certain day in 1918, General Foch smoked a cigar, because he knew, on that day, that Germany was beaten."

"What day did you smoke that cigar?" asked Morris.

The general paused, pondered, and finally opined, that the day Americans got across the Rhine, established a bridgehead, and held it: "The German general staff that day knew they were licked."

During this graphic delineation he threw up one finger, which seemed at the time so vividly to underscore his statement.

Later, I met General Eisenhower at the very exclusive cocktail party in the Chateau Laurier. I say exclusive, because an unimaginative aide had gone through the list, and cut names right and left. That incision on the social hide of Ottawa won't heal for quite a while.

It was hard to get the general alone for more than three seconds, but since I had travelled through the prairie, I tried to put in a plug for it.

"I like the prairie," I said.

"Even Kansas..."

"Even Kansas!" he ejaculated before I finished. "Why, that's the best state of them all."



NEWS OF

AGRICULTURE



1. The Board of Directors of the Canadian Federation of Agriculture, which met in Annual Meeting last month, in London, Ontario. 2. Left to right: H. H. Hannam, Ottawa, President Canadian Federation of Agriculture; W. J. Parker, President Manitoba Pool Elevators, Winnipeg, and Vice-President Canadian Federation of Agriculture; Dr. Eric Englund, United States Department of Agriculture, Washington. 3. A. H. Mercer, Vancouver, General Manager Frazer Valley Milk Producers' Association; D. J. Binnington, Saskatoon, Saskatchewan, representing Saskatoon Dairy Pool; Robert Shannon, Grandora, Saskatchewan, and S. S. Sears, Nanton, Alberta, representing the United Grain Growers Limited.

CANADIAN FARMERS PARLIAMENT

THE Canadian Federation of Agriculture met at London, Ontario, this year and was glad of it. The smaller cities are crowded enough these days but sardines are happy when they think of how people are packed in the big centres. The C.F.A. had met there once before, five years ago. As President H. H. Hannam pointed out at that meeting five years of unglamorous pioneering had ended and had been succeeded by five years in which, he said, Canadian farmers "have obtained a voice in national affairs that formerly they did not and could not have; they have improved their economic returns and position very substantially; they have raised the status of their industry in the eyes of all their fellow citizens and they are on their way to becoming a power in the land."

Mr. Hannam expressed some apprehension regarding the subsidy program. In it the farmers had extended their co-operation to the federal authorities, to help gird the nation for total war. Consumers did not realize that if farmers received their present returns wholly in the marketplace rather than partly by supplementary government payments, consumers would be paying considerably more for their food requirements—eight cents a pound more for butter, two cents a loaf more for bread, three cents a quart more for milk in summer and 3½ cents a quart more in winter; to mention only a few of the more important food products. The question now was, would floor prices be established high enough, when subsidies were withdrawn, to equal farm prices plus government subsidies. He believed that the principle of the present wheat price policy offered chances of success, that is, a floor price that would protect producers against serious loss projected four or five years into the future and with the farmers' basic price established above that by negotiation, perhaps yearly, in co-operation with producers concerned. Needless to say the cancelling of subsidies without increasing basic farm prices by a corresponding margin would be an injustice to food producers. The government, in regulating our economy in wartime, had automatically assumed responsibility for maintaining a balance between major economic groups within the nation. It followed that it was under obligation to at least carry that degree of balance forward into the post-war period.

Referring to the statement of the marketing committee at the Quebec conference that F.A.O. should participate in the drafting of international commodity agreements, Mr. Hannam said that these agreements were proposed only for a limited number of farm products, entering extensively into world trade. Some favored fixed prices but others the setting of long term floor and ceiling prices within which trading prices might be allowed to fluctuate, reflecting demand and supply conditions. An alternative would be short term fixed prices at stated intervals to reflect market conditions from time to time.

The report of the secretary, Colin Groff, showed that in the international field the federation participated in some

The Canadian Federation of Agriculture Holds Its Annual Session

outstanding events during the year. It met the delegates of Farmers' Unions of the United Kingdom and heard their proposals for a federation of national farm organizations. It arranged, and sent representatives to, a meeting of the British delegation and officers of American farm organizations at Washington.

It played an important role in the World Food and Agriculture conference at Quebec, in which President Hannam was given the status of an associate delegate in the Canadian group. The two vice-presidents, W. J. Parker and J. A. Marion, were advisor members. The cause of an international federation of agriculture was considerably advanced when the Canadian group were hosts to agricultural representatives of six nations in attendance at the Quebec conference.

The C.F.A. is represented on 18 government boards and advisory committees. It has a liaison with the War Assets Corporation, with the support of provincial governments. During the year it made four major presentations to the federal government and has been active in matters relating to marketing, the income tax, the reopening of the market for Canadian cattle in the United States, packing house strikes, Farm Radio Forum and many other matters.

Among the more important resolutions adopted at the London meeting were the following:

The government was asked to revise the Income Tax Act to provide that the farmer's income would be assessed on the basis of a five-year moving average; that breeding herds be recognized as a capital asset and the income from the sale of a herd be spread over three years for income tax purposes; that the exemptions be raised to \$1,000 and \$2,000; that allowance be made for family labor in production on the farm; that farmers would not have to collect income tax from hired help and that boards be established for appeal from the decisions of income tax officials.

A proposal from the West that while the freight rate assistance on feed grains be continued an additional payment of \$3.00 per hog be paid on all rail graded hogs originating in the prairie provinces—and that western feeders buying feed grain to be required to pay the full market price, including the equalization fee, was referred to the board after considerable discussion.

Two overlapping resolutions on rail grading and the appointment of a Board of Livestock Commissioners, both ineptly worded, after several delegates had defended rail grading, were at the suggestion of R. C. Brown, of Winnipeg, withdrawn and for them substituted a carefully drawn affirmation of policy passed two years ago. This resolution was so important that it is here reproduced in full:

"RESOLVED that the Canadian Federation of Agriculture reaffirm its requests that the Federal Government establish a Board of Livestock Com-

missioners with powers and duties similar to those of the Board of Grain Commissioners, and further requests

"THAT the said Board be empowered to administer, under the Department of Agriculture, the Livestock and Livestock Products Act, and

"THAT the members of the Board shall be appointed in consultation with organized agriculture, and

"THAT the Livestock and Livestock Products Act be amended and consolidated with other covering legislations in order to vest in the Board the power to license, regulate and control the facilities for assembling, transporting, yarding, slaughtering, processing and packing, together with the facilities for grading

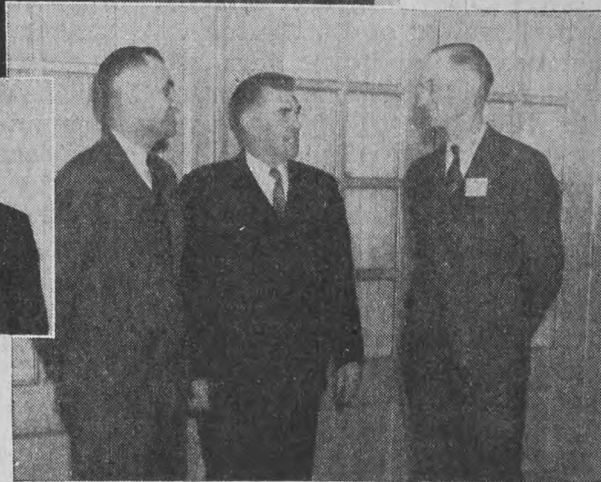
Turn to page 29

Dairy Producers In Session National Organization Meets at Niagara Falls

THE Dairy Farmers of Canada met last month at Niagara Falls, where the winter lull in the tourist and honeymoon trade left ample hotel accommodation. The organization has 29 member associations representing every group and type of dairy producers across Canada. Four years ago the producers' organizations parted company with the National Dairy Council, which they thought was too much dominated by the dairy manufacturing interests, and started up on their own account. Now they have a strong national body. The chief groups represented are cheese, whole milk, concentrated milk and butter. The weakest section in the organization is that representing the producers of churning cream. Steps are being taken to strengthen this section of the organization. Certainly churning cream producers should become more conscious

of their own interests. They constitute the most important branch of the industry in Canada and their returns are lower by a wide margin than those of any other dairy group. Another section of the Dairy Farmers of Canada takes in the dairy co-operatives. This group was set up during the past year.

President R. H. M. Bailey, of Edmonton, ably presided. He reviewed the dairy products situation in Canada. The dairy industry, he said, had been asked by the Dominion-Provincial Agricultural production Conference to increase its production of milk by approximately two per cent, the main portion to go into the production of butter. The most significant statement made by the minister of agriculture at the conference, he said, was that the present price for agricultural products would be carried on into the postwar period, provided the cost of



Top: Manitoba representatives to the Annual Convention of the Dairy Farmers of Canada held at Niagara Falls, Ontario, in January, consisted of William Elliott, Winnipeg, Secretary Winnipeg Milk Producers' Association; Fred Goodman, Winnipeg, Manager Manitoba Co-operative Dairies; Roy McPhail, Chairman Manitoba Milk Control Board; E. R. Taillieu, Pacific Junction, Manitoba, President Winnipeg Milk Producers' Association; Roland Couture, St. Boniface, Manager Manitoba Co-operative Cheese Producers' Association.
Lower Left: From British Columbia came G. W. Malcolm, Victoria, Secretary Island Farms Co-operative Association; A. H. Mercer, Vancouver, General Manager Frazer Valley Milk Producers' Association.
Lower Right: Among the delegates from Alberta were E. A. Johnstone, Red Deer, Manager Central Alberta Dairy Pool; R. H. M. Bailey, Edmonton, re-elected President of the Dairy Farmers of Canada; Reid Clarke, Didsbury, Alberta Dairymen's Association.

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production remained the same as during the war. Another significant statement was that when wartime controls were abolished commodities produced and consumed within a province would then come under the authority of the province. This would throw back on the Milk Control Boards the onus of setting the price within the provinces. The dairy industry was more concerned with the labor problem than any other branch of agriculture and he quoted the head of the National Employment service as saying that the farm labor problem might be even worse in 1946. Some of the reasons were, lower wages than in other industries, longer hours and not as pleasant employment. The dairy industry was willing to pay the highest price for labor that the industry would stand. It could not do more.

Mr. Bailey summed up his address in these words:

"What I have been trying to set up in this address is to suggest that there be a new deal for dairy farmers. 1, A value placed on family labor on the dairy farm; 2, A price for churning cream at which it is economically possible to produce; 3, A consumer price for butterfat that will make it possible for the dairy farmer to produce at a profit and pay wages to himself and family and take care of manufacturing and distributing charges on an equitable basis; 4, The opportunity for the dairy farmers to enjoy some leisure in life in order that they may enjoy the advantages of modern living and 5, Relief from the position of hard labor 365 days of the year.

The Dairy Farmers of Canada, can, by taking care of the forgotten dairyman—the butterfat producer—solve the problem of all other branches of the industry."

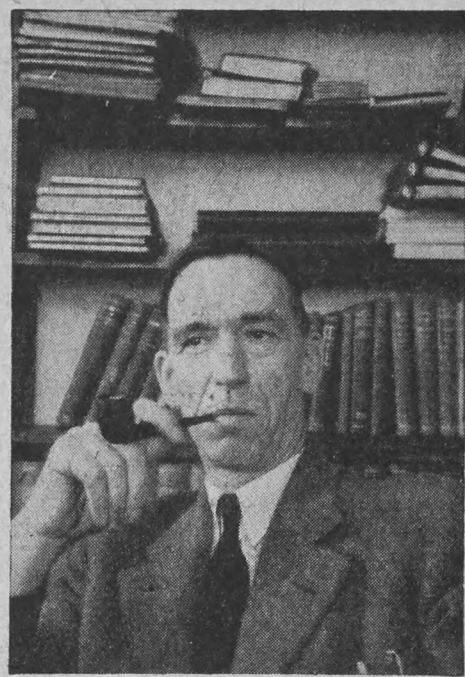
The most forgotten dairyman is the producer of churning cream. All through the conference ran that theme. There was great concern regarding the downward trend of butter production. If the trend persists, there is no doubt but that the butter ration will have to be considerably reduced before the year is over. Only one method of increasing the output is in sight and that is to bring the price of butter more into line with that of other dairy products. As to what the increase should be was a matter on which differences of opinion were expressed, both at the dairy conference and at the conference of the C.F.A. the following week, when the question was up before it. As high as 10 cents a pound was advocated by some.

The Policy Committee, which brought in the proposal for a four cent increase, had been, it was explained, in a quandary. A positive price stimulus was desirable. But the matter of diverting milk from cheese to butter had to be kept in mind. Although a reduction of 3,000,000 pounds of cheese was suggested at the Dominion provincial agricultural conference, it had to be remembered that Canada has made commitments for shipments of cheese overseas. Cheese is a high protein food and a corrective food as well and is an essential part of the ration, both in Britain and in European countries. Balancing all the factors, it was decided to ask for a modest increase of four cents a pound.

With regard to cheese, whole milk and concentrate milk, no increases were asked, though President Bailey explained that this did not debar production groups asking for increases. For example, the Milk Control Board of Manitoba has granted the Winnipeg whole milk producers permission to ask the W.P.T.B. for an increase.

One of the speakers was Col. J. H. Tremblay, formerly an agricultural representative, an M.L.A. for Grouard, Alta., a war veteran, and now Canadian agricultural commissioner for North-eastern Europe. He gave a vivid description of the starvation and near starvation which prevails over most of his territory.

The following week several of the officers of the organization attended the C.F.A. meeting in London. As had been previously explained by President Bailey, both directors' meetings and the annual meeting had been timed to coincide with similar C.F.A. meetings to save duplication in travelling. One of the directors of the Dairy Farmers is on the executive of the C.F.A. organization.



New Science Director

APPOINTED January 1 of this year to succeed Dr. J. M. Swaine, superannuated after 34 years with the Dominion Department of Agriculture, Dr. K. W. (Ken) Neatby, 45-year-old, six foot 6 1/4-inch Director, Line Elevators Farm Service, Winnipeg, and past president of the Agricultural Institute of Canada, will take up his duties sometime this month as Director of Science Service, Dominion Department of Agriculture, Ottawa.

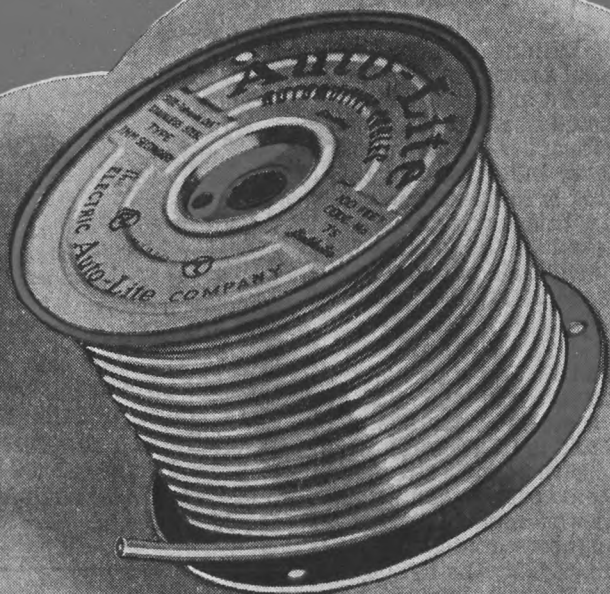
Coming to Canada when six years of age, he was reared on the home farm at Renown, Saskatchewan, attended the University of Saskatchewan and was graduated in Agriculture in 1924, completing his Masters degree the following year. Appointed to the staff of the Dominion Rust Research Laboratory, Winnipeg, in 1926, he was for the next nine years, active in the plant breeding program which led to the development of rust-resistant wheat. During the same period, he took post-graduate work at the University of Minnesota, securing his Ph.D. degree in 1931. In 1933 and 1934, the United States National Research Council awarded him a research scholarship, on which he did work at Cambridge University, England, on the genetics of rust resistance. In 1935, he became the head of the Department of Field Crops at the University of Alberta, where he paid special attention to the development of drought-resistant wheat and investigations into the influence of soil and climate on wheat quality. Late in 1939 he moved to Winnipeg to take up the position from which he has now been drawn into the service of the Dominion government.

Chairman of the National Wheat Committee, and until recently of the Manitoba Board of the Canadian Forestry Association, Dr. Neatby has developed broad scientific associations through membership in the American Association for the Advancement of Science, the American Genetics Association, the American Association of Cereal Chemists, the Canadian Phytopathological Society, the American and Western Canadian Societies of Agronomists, and the Scientific Club of Winnipeg.

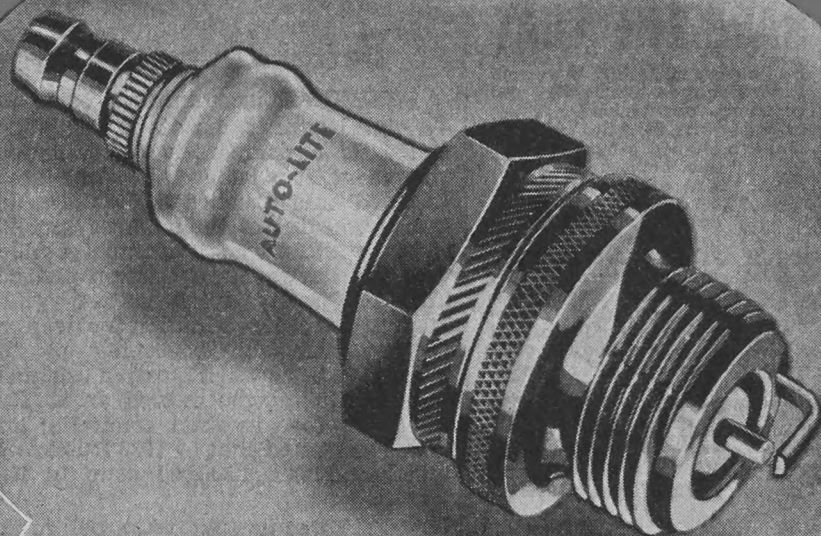
Dr. Neatby held the rank of Lieutenant with the Reserve Army, with which he has been associated for the past three or four years. A crack rifle shot, for the past two seasons he has been an active member of the Royal Winnipeg Rifle team in the Brigade shoots. In recent years, he has substituted golf for tennis and is said to have contributed substantially to the Canadian golf ball industry.

Married, but without children, he has been known on occasion to boast about his Plymouth car, his lawn, and the paint job he did on the house last summer. Friendly, likeable, and with a good sense of humor, singing is one of his major extra-mural activities. On occasion he has been permitted to lead banquet groups in community singing; is reported to sing Sweet Adeline with much effect; was last year a vice-president of the Men's Musical Club of Winnipeg; and in his earlier years won the bass solo competition at the Winnipeg Musical Festival.

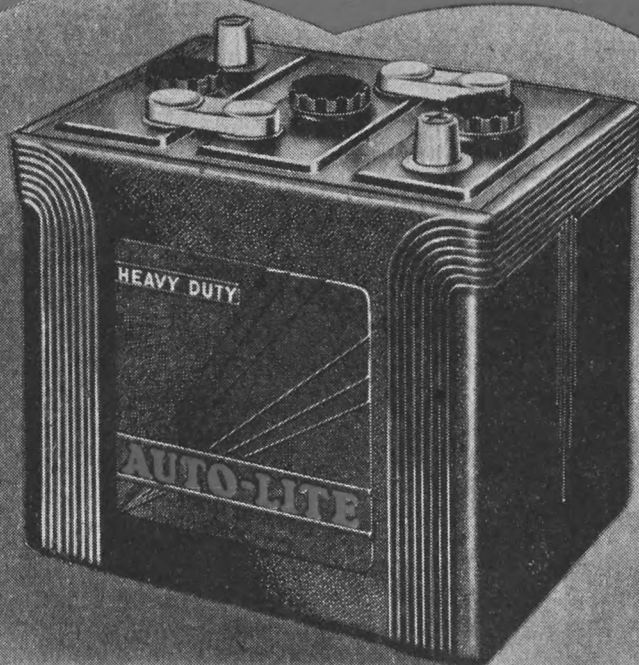
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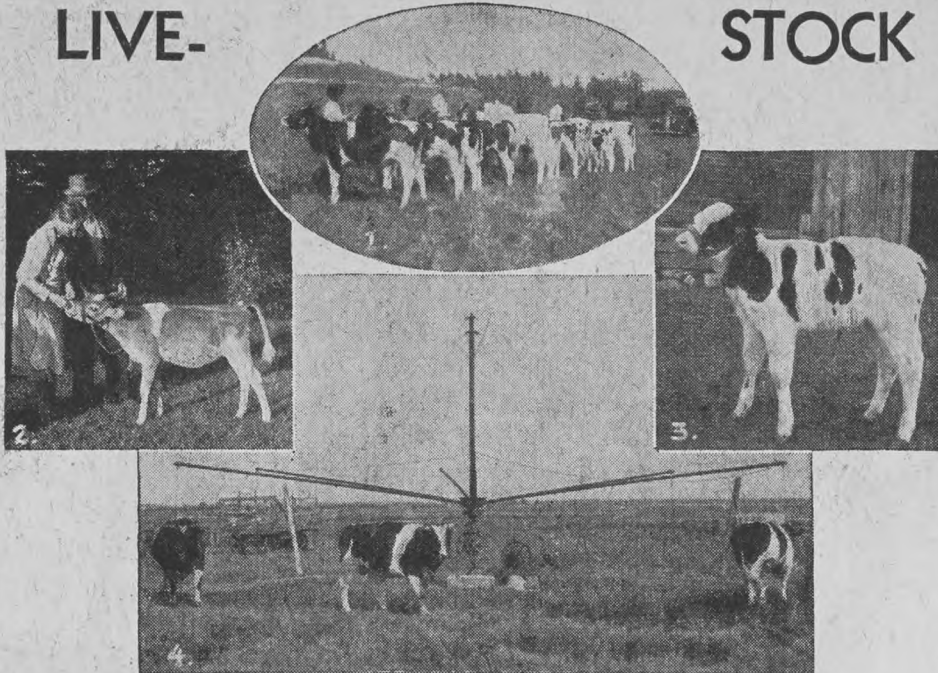
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Better Livestock From Artificial Insemination

ARTIFICIAL insemination, or artificial breeding, as it is sometimes called, is a comparatively recent development. It is believed that the Arabs followed this practice 2,000 years ago in the breeding of their horses, but like so many ancient achievements, it failed to make its way into western civilization for many hundreds of years. Modern use of insemination for livestock began about the beginning of the present century when Russian scientists began to take some interest in it. This interest spread to other countries; and it was estimated that by 1938 Russia was breeding about 1,500,000 cows in this way.

About three or four years before the war, interest spread actively to other countries. The first serious public discussion of the question in Canada probably took place at the Manitoba Dairy Convention in 1934, because, while scientists in both Canada and the United States, as well as in other countries, were doing research work on the subject, not sufficient work had been done to warrant practical application of the idea. In 1935 a set of the necessary equipment was imported from England by the Animal Husbandry Division of the Dominion Experimental Farms Service, Ottawa; and the first calf resulting from the use of this equipment was born in February, 1936. During the summer of 1935 a set of equipment had been obtained in Manitoba from the Dominion authorities and some cows were bred around Winnipeg. The first "test-tube" calf to arrive in Manitoba as a result of this work was a grade Holstein, born August 17, 1936, on the farm of D. N. Doolittle, Dugald, Man. Prime movers in the Manitoba experimentation were W. D. Davies, then Livestock Specialist in the Extension Service of the Manitoba Department of Agriculture; J. M. Bowman, Livestock Fieldman for the Dominion Department; and Professor J. M. Brown, University of Manitoba, who provided most of the then available technical information.

At first, the proper methods had not been developed, and not many cows were got in calf. However, there was enough vision and enthusiasm among the prime movers, and the work was continued off and on for the following two summers. In 1938 Davies went to Moscow, Idaho, to attend a meeting of the Western American Society of Animal Production; and there, for the first time, was able to secure from the University of Idaho, an outline of practical insemination methods. Research work had been proceeding in several of the United States and in the United States Department of Agriculture; and it was in May of 1938 that the first organization or society in the U.S. for the insemination of dairy cattle on a commercial scale was established in New Jersey, where 102 dairymen enrolled 1,050 cows. The next year, 1939, there were six associations in the United States with 7,539 cows; and by 1943 the number of

associations had risen to 99, with 23,448 members enrolling 182,524 cows. In 1945 it was estimated that the number of associations had risen to at least 125 and the number of cows to more than 350,000.

Denmark, too, became actively interested in artificial insemination about two years before the war and at the end of 1945 had 96 societies, whose members owned an aggregate of 345,000 cows. Official statements have indicated that this method of breeding is to be encouraged, in the hope that within a comparatively few years, nearly all of the good dairy cows in Denmark will be bred from only a comparatively small number of the very best dairy sires.

In Britain, interest has been active for some years and in 1943 a delegation of scientists was sent to the United States to make a study of methods in use there. There had been organized the Cambridge and District Cattle Breeders' Society, with 30 members at the beginning of 1943. By the end of the year there were 343 members; and 1,527 cows had been inseminated. By the middle of 1944 the society had not only developed the first bull in Britain (Friesian;—Holstein to you) to have been bred artificially to over 1,000 cows, but its breeding centre had become the first official British artificial insemination centre, with three bulls in service, two of which were Dairy Shorthorns. Meanwhile, another centre had been established at Reading, while a private station had been established in Buckinghamshire, which was strongly supported. This private station was set up in May 1942 and the first insemination was made on August 31.

Since November 1, 1943, all artificial insemination stations in Britain have been under strict governmental supervision; and since June 1944, the licensing of stations has been under the control of a central advisory committee, who are, in addition, charged with the responsibility of advising the minister on the economic aspects of the control and development of the centres. By November 1945, the government had determined to set up special research stations and the minister stated that, "It is the government's intention that artificial insemination of cattle shall be developed as a national service in the interests of the livestock industry." The National Institute for Research in Dairying at Reading was, therefore, selected as the first research centre.

Meanwhile, in Canada, considerable confidence in the value of artificial insemination had been developed in the Manitoba group by the spring of 1939; and J. M. Bowman, who left the Dominion service and became agricultural representative at Neepawa, began to organize a breeding centre there. Breeding work started in the winter of 1939-40. For a time it received financial assistance and in the summer of 1940 there were 1,180 cows bred. Said W. D. Davies, now Assistant Chief, Livestock and

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Poultry Division, Ottawa, in telling me about it not long ago: "Jim Bowman got his white hair that summer. There was certainly plenty of grief. I remember that he was called on to breed 27 cows one Sunday morning." At first the Dominion put in four bulls and the unit bought two; but in the fall of 1940, all but the Shorthorns were eliminated. Since then the unit has been operating on a three-bull basis. From 1941 to 1944 the unit was supported by a grant from the Horned Cattle Fund, but in 1945 it was separated from the office of the agricultural representative and is now operating on its own.

Next to be organized was a Jersey-Guernsey unit at Yarmouth, N.S., in 1941, which has since been breeding 800 to 900 cows yearly. In 1942-43 there were eleven units organized in Nova Scotia and New Brunswick, of which eight are still operating. A beef unit was organized in Quebec in 1942 at Shawville; and in 1944 a Jersey unit at Knowlton.

At Regina, Sask., a dairy unit was organized in 1942, which, under the direction of J. H. Coles, Senior Livestock Fieldman, has been successful in every way. Both Dominion and provincial departments co-operate and, in addition to breeding about 900 cows yearly at Regina, semen is shipped winter and summer to Prince Albert and Moose Jaw. A second unit was also organized at the University of Saskatchewan, Saskatoon.

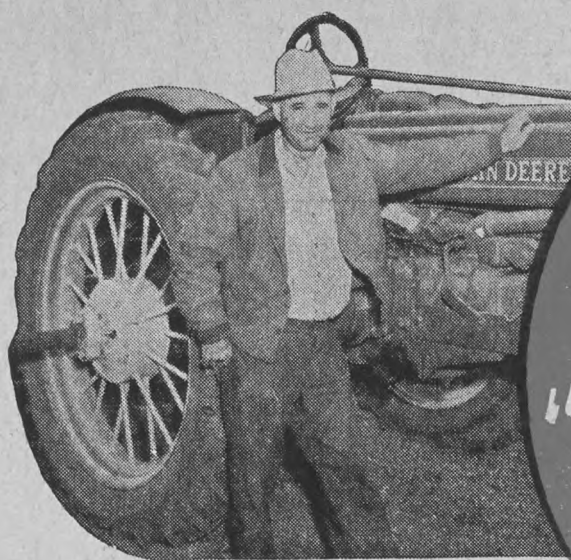
In Alberta, in 1943, a unit was established at the Olds School of Agriculture, after a careful study of the subject by a committee appointed by the provincial department of agriculture. A number of bulls are kept in service, all highly bred; and are available to breeders of pure-breds throughout the province, as well as to local groups of grade owners.

Ontario has three units organized, two by owners of pure-breds and one among cheese-milk producers in Leeds County. Also, at the Ontario Agricultural College, artificial insemination has been underway for some years and semen is shipped to breeders across Canada, for long distances.

Little, if any, activity took place in British Columbia until 1944. During 1944-45 four units were organized at Surrey and Chilliwack in the Fraser Valley; and also in the Okanagan Valley and on the Island. At Surrey during the first six months more than 4,000 cows were bred; and at Chilliwack there were 1,200 during a similar period.

Thus, in Canada, at the present time there are approximately 30 artificial insemination centres operating, for the most part, with both provincial and Dominion government support in some form. Though these have all been organized during the last six or seven years, the numbers of cows bred are not high. Though the average number of cows bred per bull by artificial insemination is around 290, as compared with 47 for the 2,000 bulls on loan from the Dominion government to breeders all across Canada and used for natural breeding, this average is low as compared with around 500 cows each, for the 650 bulls used for artificial insemination in the United States. The average number of cows per insemination unit or association is, therefore, also low in Canada; and if this system of breeding holds much promise for the future of the livestock industry in this country, it is important that it be extended. A further article next month will discuss some features of an artificial breeding program, which are important from the standpoint of its future success.

The livestock annuals are coming again. Orders at \$1.00 each, postpaid, will be filled in the order received, for the 1946 Scottish Farmer Album and for the similar annual from The Farming News. The supply will be limited, but is on the way, so don't delay if you want one or more. Address The Country Guide Book Department, 290 Vaughan St., Winnipeg, Manitoba, enclosing money order or postal note. Copies will be mailed promptly after arrival.



MEET A FEW
OF THE
"top salesmen"
FOR

JOHN DEERE TRACTORS

NOT one of them carries an order blank—not one is on the John Deere payroll. But their enthusiasm has been responsible for many a sale. They are typical of the "steady customers" for John Deere Two-Cylinder Tractors . . . and there are literally thousands and thousands of them.

These men were sold their first John Deere on features they thought a farm tractor should have. They *enthusiastically bought* their second . . . third . . . fourth . . . even fifth John Deere because of their day-to-day, profitable experience with the John Deere in the field.

If you're in need of a tractor, check up on the outstanding advantages of *economy* in operation and upkeep of the John Deere . . . the *simplicity* for more dependable performance . . . the easier, on-the-farm maintenance . . . the ease of handling . . . the *durability* for longer life which *John Deere Two-Cylinder Engine Design* gives you.

John Deere Tractors are rolling off the assembly lines in twenty up-to-the-minute models and six power sizes—for every farm . . . every crop . . . every pocketbook. If you cannot get one immediately, the day is not far off when the type and size that fits your needs will be available. Get in touch with your John Deere dealer today.

July 9, 1945

"We farm approximately 1,200 acres and now own three Model 'D' tractors, two on rubber, one on steel. Our first Model 'D' was purchased in 1938."

Leon Tardiff
Ste. Rose du Lac
Manitoba

★ ★ ★

Sept. 1, 1945

"During the past eight years I have owned two John Deere tractors, a Model 'D' and a Model 'H'. I am well satisfied with both."

H. W. Schellenberg
Steinbach, Manitoba

★ ★ ★

Aug. 20, 1945

"I used a Model 'D' John Deere tractor for seven years before purchasing my new one. I've had wonderful results with both and cannot praise them enough."

Orlo Wm. Brown
Wheatland, Manitoba

Aug. 10, 1945

"We are farming approximately 2,400 acres of land, using two Model 'D' tractors and a Model 'G'. These tractors are usually in the field continually from spring until freeze-up in the fall."

Frank Fisher
Wadena, Sask.

★ ★ ★

July 24, 1945

"We purchased our first John Deere Model 'D' tractor in 1936. Increasing our acreage, we found we had too much for one tractor to do, so we purchased another in the fall of 1941. It has given the same unfailing performance."

Johnson Brothers
Wynyard, Sask.

★ ★ ★

Sept. 26, 1945

"In the past nine years we have owned five John Deere tractors. We have had three Models, 'D', 'A' and 'G'. They were all very satisfactory."

Vincent Erickson
Penhold, Alta.



JOHN DEERE PLOW COMPANY, LTD.

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CALGARY

REGINA



Model "GM"
3-plow size.



Model "A"
2-3-plow size.
Seven Types.



Model "H"
1-2-plow size.
Two Types.



Model "B"
2-plow size.
Seven Types



Model "D"
3-4-plow size.

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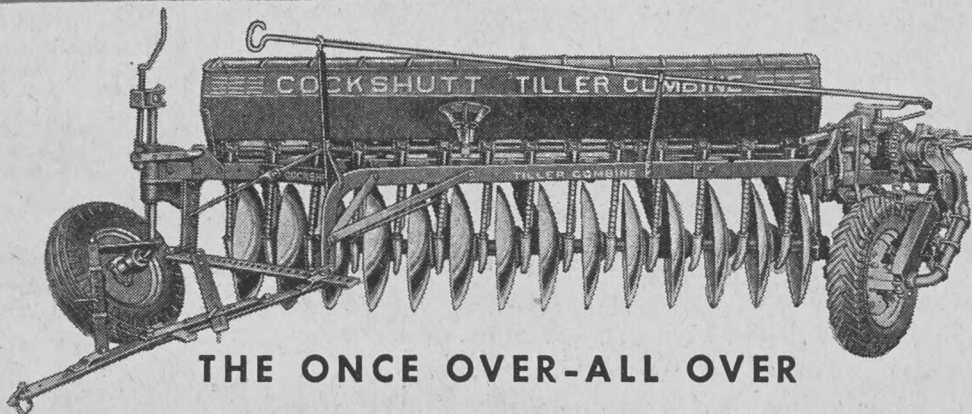
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STEEL DRILL



A dependable, accurate, sturdily-built seed drill... designed to do your planting economically, efficiently and thoroughly. Available in 16-20-24-28-36 run sizes.

Light weight
Immense strength
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Seeding and tilling in one operation prevents loss of soil moisture and results in early germination and rapid, healthy growth. For downright economy, you can't beat this triple-duty profit maker... it seeds, discs and cultivates! A size for every need, in Nos. 33 and 35 types.

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CALGARY EDMONTON

Farm Animals Need Iodine

DURING the winter months there is a higher percentage of pregnant female livestock on farms than in any other season of the year. In a great many western areas there is insufficient iodine in the feed and water supply to maintain livestock in full health. When iodine is lacking, litters of pigs are likely to be weak and sometimes hairless; lambs and calves may have goitres; and foals joint ill. It is not really safe to leave iodine out of the ration of farm animals in any part of the prairie provinces.

Most careful livestock men use iodized salt regularly; and for breeding stock an additional allowance of potassium iodide is supplied daily during the winter months. Two ounces of potassium iodide can be dissolved in about half a pint of warm water, and sprinkled over 100 pounds of granular iodized salt. Too much should not be mixed up at one time, since loss of iodine occurs after about two months. This amount of potassium iodide would be sufficient for breeding ewes. Brandon recommends dissolving two ounces of potassium iodide in a gallon of water, and providing a teaspoonful of this solution daily for each brood sow, by adding it to the feed or drink. For brood mares, the allowance should be two teaspoonfuls.

Brrr! It's Too Cold

THOUSANDS of animals kept on farms during the winter months in western Canada do not produce as they should, or make the gains they should, partly for the reason that all the water they get to drink is ice cold.

Cattle, particularly dairy cattle, require large quantities of water. If the water is too cold, they drink too little. If they drink too little, some of the natural body functions may be checked, and an abnormal condition set up within the body.

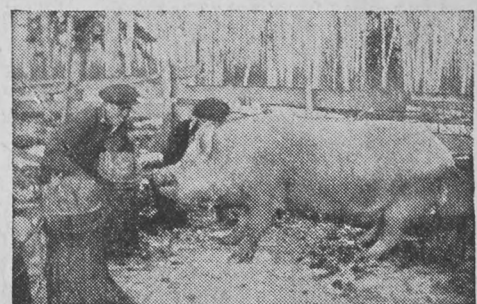
Aside altogether from the humanitarian aspect of the matter, it is advisable, from the point of view of profits, to take the chill off drinking water for all livestock. This can be easily done by means of a heater in the drinking tank. Warm water is said by authorities to be relaxing in its effect, and to serve as a partial substitute for succulent feed. Pigs do not do well on ice-cold drinks, and with all classes of livestock, drinking too much very cold water may produce an unthrifty condition, including constipation and sometimes indigestion.

A Million Pounds of Club Calves

NEARLY 50 carloads of calves, weighing 1,089,366 pounds on the hoof, were produced by the baby beef clubs in the Province of Saskatchewan in 1945. The sale value of these calves, averaging 16.04 cents per pound live weight, netted \$174,800 to club members, and saw a record price of 62.05 cents per pound live weight paid for a 940-pound steer.

The Extension Department of the University of Saskatchewan reports that many of the calves sold went through public auctions held in conjunction with fat stock shows in the province, of which there were a number, including Saskatoon, Prince Albert, Lloydminster, North Battleford, Moosomin, Weyburn, Estevan and Ogema.

A matter of some interest lies in the fact that carcass grades on 1,100 of the Saskatchewan club calves were recorded at the Extension Department of the University. Of these, 50.9 per cent graded Red; 24.1 per cent Blue; and the remainder, no grade. This means that 75 per cent of the 1,100 carcass-graded



Lin. Raglan, High Prairie, Alta., (partly hidden), with the help of Herb Franklin, a neighbor, takes the tusks from a stag before shipping, to the accompaniment of deafening noises from the victim. Hoof clippers did the trick in a minute.

calves graded either red or blue, which is said to be considerably higher than the percentage normally achieved by commercial cattle. On the basis of these figures, the Extension Department comments as follows:

"One can see that the junior baby beef clubs are increasing the quality of

beef in this province, and at the same time they are contributing to the overall livestock industry in the West. With the trend now leaning to rail grading, and the necessity for more specialized and scientific feeding, the club members are off to an excellent start in the right direction."

An Experience With Sheep

I AM an English farmer's son and always lived on a farm in the Old Country where we kept lots of sheep and had lots to do with them there. I came out to this country in the spring of 1893 to Danville, Quebec. I just stayed one year in lower Canada and then moved up to Treherne. I was offered bigger pay to stay on, but I had to come West. I worked out here that first summer and in the fall rented the farm I was working on, a mile and a half north of Treherne and farmed it three years when I sold out and went to B.C., with the intention of going to the Yukon. That was in the fall of 1897, but when I got out there, did not think much of the look of things and came back and bought wild land north of Holland, where I now am, in the flats of the Assiniboine River.

As soon as I had got established I fenced a small rough pasture and got a few sheep and a good ram and just started to gradually build up a flock. In one deal I got hold of a few good Lincoln ewes, then I sent east and got a really good Lincoln ram and gradually got into some good sheep. I have weighed lots of fleeces just as cut off the sheep 22 and 23 pounds. Well, I got into quite a flock of sheep, and I had one rough, hilly quarter fenced for pasture, then I started fencing my farm into sheep-tight fields, so that I could put them to grass instead of fallow. My way was one year hay and two years pasture then break up for wheat; and did it work. The first field I did that way when broken gave me 75% bushels to the acre.

I had got this plan going and was doing well with the sheep when I began to have trouble with dogs. I shot dogs and shot dogs, but do what I would, it got worse and worse. Sometimes I knew the dogs and got a little damages; at others I got that miserable pittance the Council pays when you don't know who owns the dogs. How many dogs I shot in a few years I don't know. Then came the climax. I was away from home one evening and my girl and boy went to the field the sheep were running in for the day, to bring them in for the night. We had sheds and yards for them, never leaving them out for the night. There were three dogs at them, with, I think if I remember right, six ewes killed and the others run all over the place, some into the bush and some into wet holes in the field. This was about one week before they would start lambing, and didn't I have a job getting them through lambing that year. By the time it was over I was about all in, and I was out altogether 16 ewes and 80 lambs. Well, the end of it was I sold all the sheep but just a few I could keep in a little pasture by the house, but the dogs came again in the night and killed seven more ewes a year or so later and I sold out of sheep.

The time I lost the big lot I knew the owners of the dogs, but all I got was part of the value of the sheep first killed. Since one man owned two of the dogs, he paid two-thirds. The other man owning the other dog promised to pay his one-third, but never did. I will just give you the figures of what I lost. My lambs I shipped that fall brought me \$14 each on the car and I sold my ewes that I cast off that fall at \$25 each. That meant that my loss was:

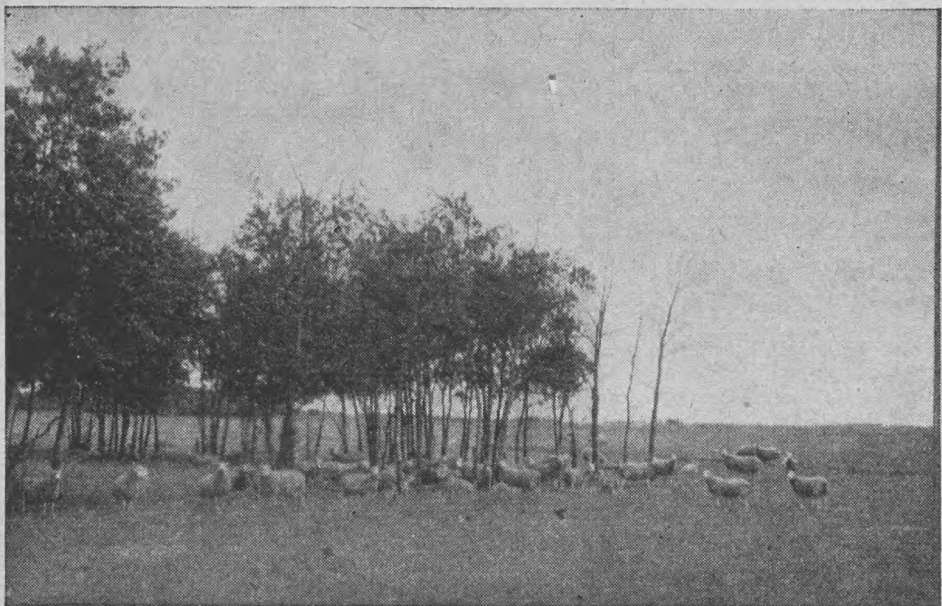
Sixteen ewes at \$25 is \$400; 80 lambs at \$14 is \$1,120. Total \$1,520.

I figured when I had the sheep and by working the land the way I did, I could make as much out of the land the years the sheep were on it as the years I cropped, and had less work. Another thing, fallow never put the land in the shape the sheep and grass did.

One year I was at Brandon fair and a man I knew had a flock of long-wooled sheep there and did well with them. He also did well at Regina, Saskatoon and other western fairs. He told me at Brandon he was going to have his sheep at Holland fair and would I bring some to make up a show. I did take enough to double enter and got first and second in nearly all the classes. At the time I had the big lot of sheep, quite a few farmers around here began going in for them, and I did well selling to them, but dogs have put them pretty well all out of it. Not long ago I was told of a man just west of me losing 30 or 40 from the same old trouble, dogs!

Lots of people, when I started into sheep here, said I would not be able to keep them because of wolves, there being a lot of wild, rough land just north of me, but they gave me very little trouble. I did lose a lamb or two once in a while by them, but I always got Mr. Wolf. They aren't a patch on dogs.

Another thing about farming with sheep: Grass instead of fallow is the most effective way of stopping drifting that I know of. Sheep, in my opinion, are the best paying kind of stock a man can have on the farm. I always used to sow a pound of rape seed to the acre mixed with the other grain in the seed drill on about 100 acres every spring, this would just be small down in the crop till it was cut, then it would grow like the dickens and the sheep would be pawing it out of the snow all winter and do well on just it and straw and get real fat. Why doesn't the government do something about this dog curse. It is losing this country hundreds of thousands of dollars every year. Put a \$5.00 tax on all these useless curs and get them killed off. Of course, men with stock should be allowed a certain amount of working dogs, the same as in England, according to the amount of stock they have, but all other dogs over six months old should be taxed.—E. J. Walker, Holland, Manitoba.



This flock was caught by The Guide camera on the farm of Jonathan Fox, Jr., Lloydminster.



*working with Canadians in
every walk of life
since 1817*

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FRANKLIN Protection Helps Increase Livestock Production

FREE CATALOG

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When you use FRANKLIN Protective Products, a few dimes save many dollars.

You get uniform quality that assures Dependable Results.

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causes widespread losses. Vaccination for stimulating resistance is recommended, using FRANKLIN P P BACTERIN Pasteurella Pseudodiphthericum 10c a dose with quantity discounts.



FRANKLIN VACCINES

With every Pint, she's LOSING SALT!

**YOU MUST REPLACE
BY KEEPING SALT ON
YOUR COWS' DIET
AT ALL TIMES.**

COWS put a gram of salt into every pint of milk. Cows in calf, heifers and calves have also a high salt requirement. Tests on 250 cows over a 2-year period at the New York World's Fair showed that cattle should have all the salt they want. Feed 1-lb. "Windsor" Iodized Stock Salt with each 100 lbs. of chopped feed—let them supplement with large "Windsor" Iodized Salt Blocks in pasture and 5-lb. Licks in the manger.



WINDSOR IODIZED SALT BLOCKS
IODIZED STOCK SALT



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Look...

a 4-Wheeler

**with the Advantages of
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HIGH CLEARANCE

TOE-TOUCH TURNING BRAKES

POWER TAKE-OFF

POWER CONTROL for Implements

Here is a tractor made-to-measure for farmers who want more ground clearance and a higher drawbar than are provided by most four-wheel tractors. The Case "DC4" also carries as standard equipment such modern conveniences as power take-off to drive power binder or combine . . . assisting brakes to make short turns easy even on soft, sloping land . . . variable rear wheel tread. Engine-powered control for tractor-mounted implements is available whenever desired.

In capacity and construction the "DC4" is like the well-known Case "D." It pulls a 3-bottom moldboard plow in most conditions, other implements of similar draft. Like the mighty 4-5 plow "LA" . . . in fact, all of today's Case tractors . . . it has the fuel-saving fourth gear that handles light work at reduced engine speed, as well as providing quick, safe transport.

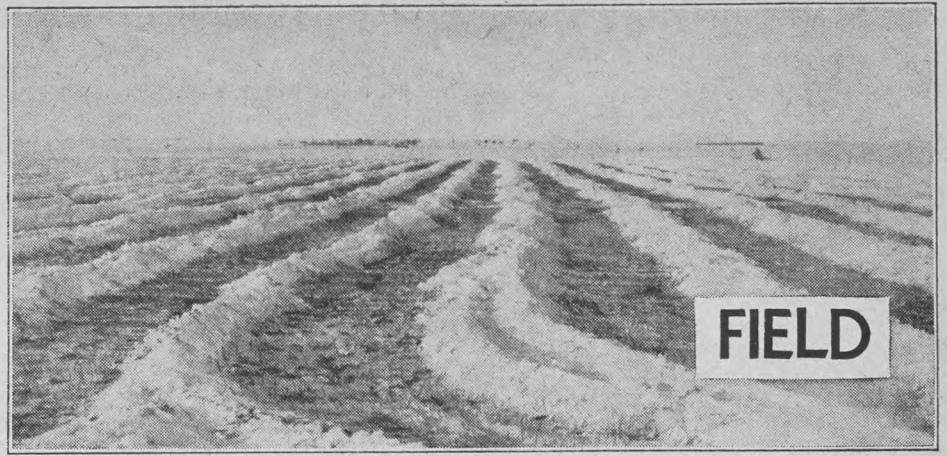
With a "DC4" you are ready for all the modern methods and machines of advanced agriculture. With any Case tractor you get the quality of ENDURANCE—extra years of useful life with low yearly upkeep. Plan now for the long pull ahead; see your Case dealer.

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**12
GREAT
TRACTORS**

Power-Controlled Implements for all 12 Case tractors include Centennial tractor plows, one-way disk plows available with seeder boxes, the Soil-Conservation disk harrow, Seedmeter grain drills, field cultivators. Ask your Case dealer or write for catalog; mention size of tractor to fit your farming. J. I. Case Co., Calgary, Edmonton, Regina, Saskatoon, Winnipeg, Toronto.



FIELD

Snow ridging to conserve moisture and prevent excessive run-off was tried successfully at Scott during the depression years 1937-39. Photo: Scott Exper. St'n.

Turning Barnyard Manure Into Cash

By M. J. Tinline, Superintendent, Dominion Experimental Farm, Brandon, Manitoba

THE soils of the prairies vary greatly in fertility. Angus MacVicar, farming on the Portage Plains, when asked, "How deep is the surface soil on your farm?" replied "seven feet." On the other hand, the surface soil over most of the prairies is considerably less than seven inches deep. In many of the older settled districts where grain growing has been exclusively followed, the depletion of the surface soil is serious. The rich surface soils of the Souris Plains have been thinned by winds that lifted the finer soil particles from unprotected fields. The downward movement of soils borne by water, on slopes of even slightly undulating land, has resulted in clay-covered knolls, whose greyish appearance can readily be recognized from the roadside. Frequent cultivations of the fallows play their part in reducing the organic matter in the surface soil. On many of these same farms there are hillocks of barnyard manure, the accumulation of years—a wastage that some day may well bring want to the people living on the Canadian prairies. In the farm leases in the older countries there is invariably a clause binding the tenant to spread manure produced on the farm, back on the farm fields.

Two reasons are usually given by prairie farmers for not spreading manure. First it is claimed that fresh manure spread on the land increases weeds. The second is that too much labor is involved in allowing manure to rot and then spreading, thus necessitating twice handling. Then again there has been considerable doubt in the minds of many farmers as to whether applications of manure did materially increase yields.

The experimental farm at Brandon commenced many years ago to investigate the returns obtained from barnyard manure when applied to the grain fields of western Manitoba. These investigations show that an application of ten tons of rotted manure continues to add to the crop yields for three seasons after the year of application. Tests made on the Reclamation Station at Melita show that one application of manure increases yields of grain more than does two applications of commercial fertilizers.

On the rich heavy river bottom land at Brandon over a twenty-year period each acre manured has yielded five bushels of wheat and three bushels of oats more than unmanured land. On upland, lighter, sandier soils at Brandon each acre receiving manure has produced nine bushels of wheat more than land left without fertilizer of any kind. Again, on the sandy soils on the

Melita Reclamation Station, the returns from each application of manure have averaged eight and a half bushels of wheat. In these experiments there are indications that the best time to apply manure is during the summerfallow year. The bacteria that bring about the decomposition of manure are heavy users of available nitrogen; and when the manure is applied immediately before seeding the crop, it is believed that the bacteria breaking down the organic matter, compete with the crop for the nitrogen in the soil. This theory appears to be fairly widely accepted.

Rates of application of from 6 to 18 tons have been tested. The yield from the first crop shows no advantage from the heavier rate, but the residual effect from the heavier rate shows in the succeeding crops of grain to the extent of increasing the yield by several bushels per acre.

Realizing that rotting manure reduces the weed seed content and that one of the main reasons for accumulating piles of manure is the labor shortage, Brandon Farm investigated the power manure loaders that are now commencing to come into production. With a view to having advance information, a manure loader was built at the Reclamation Station, Melita, by J. V. Parker, the Farm Manager. It was modelled on the plan of the one in use at the Lethbridge Station, with the exception that heavier material was used in certain parts of the construction. This loader has been tested both at Melita and the Brandon Experimental Farm. This loader can keep several manure spreaders working at top speed, even when the haul is comparatively short. It is used on a rubber tired F.20 I.H.C. row-crop tractor. The power take-off is used to operate the hoisting device.

It is anticipated that a number of machine companies will have a few manure loaders on the market this coming year. For the most part these will be operated by hydraulic power. The farmer who is keeping livestock on a large scale can effect quite a saving in labor by using a power manure loader. On the other hand the farmer who is operating on a much smaller scale may not find it profitable to purchase a loader for his own use. A loader is one piece of equipment that might either be owned co-operatively; or, a few individuals in each community, who have suitable tractors, may find it to their advantage to construct or purchase a loader and use it for custom work. Where a loader is at work there should be several spreaders available, thus speeding up the work and dispensing with manual labor almost entirely.

Thorough Seed Cleaning Pays

MORE seed is cleaned each year with the ordinary fanning mill than by any other method; and according to H. J. Kemp, Dominion Experimental Station, Swift Current, the fanning mill, while not the most efficient for either grading or cleaning, will do fairly satisfactory job if operated at the proper speed and if the proper sieves are used. Seed cleaning machinery is of several types, but nearly all types are designed to separate seed according to size, shape or weight. Machines supplied with sieves separate, as a rule, according to the diameter of the kernels. Those equipped with discs, cylinders or angle screens all

have pockets of specified sizes to separate seed according to length. Other machines which have equipment for providing suction or wind blast, separate according to weight.

One of the important things to remember when operating the ordinary fanning mill is that it must not be used beyond the capacity to do first class work. For this reason, engine power, as a rule, is better than hand power, since the cleaner is operated more steadily.

"Actually," says Mr. Kemp, "only two screens are required in a machine to do good work. A top screen of the



Don't you dare come between waffles and me!

**Shame! Saying such things about my waffles!
Because I love them—heaps of them. See?**

Sure, sure—we see. Waffles taste swell, build you up—and couldn't be easier-to-eat. But that's the point. They're another of the many soft foods you enjoy.

What now! Are soft foods taboo?

Not at all! But they don't give you much chance to chew. They cheat gums of needed work—of healthful exercise.

You're telling me my GUMS need exercise?

Right! Nowadays gums are often flabby, sensitive—your tooth brush may show “pink” as a warning signal of neglected gums. But massaging with Ipana Tooth Paste will not only help your gums—but your smile, too!

Massage help my SMILE? Be reasonable!

Couldn't be more so. Doesn't a radiant smile say “sparkling teeth”? Well—sound, bright teeth depend so much on healthy gums. And Ipana and massage help the health of your gums. Makes sense, doesn't it?

But getting back to “pink tooth brush” . . . Yes, let's! And right here we'll remind you—if your tooth brush starts flashing that tinge of “pink”—take heed. *Take off for your dentist's promptly!*

Very likely he'll say your gums are sensitive—robbed of exercise by soft-cooked foods. And, as so many dentists do, he may suggest “the helpful stimulation of Ipana and massage.”

With good reason! For Ipana Tooth Paste is specially designed not only to clean your teeth effectively but, with massage, to help the gums, too. So, every time you brush your teeth, massage a little extra Ipana onto your gums. Feel the invigorating “tang” as circulation speeds up in the gum tissues—helping gums to firmer health.

If a bright and winning smile is worth this simple care to you—start now with Ipana and massage!

Wake up lazy gums with Ipana and Massage!



A Product of Bristol-Myers—Made in Canada



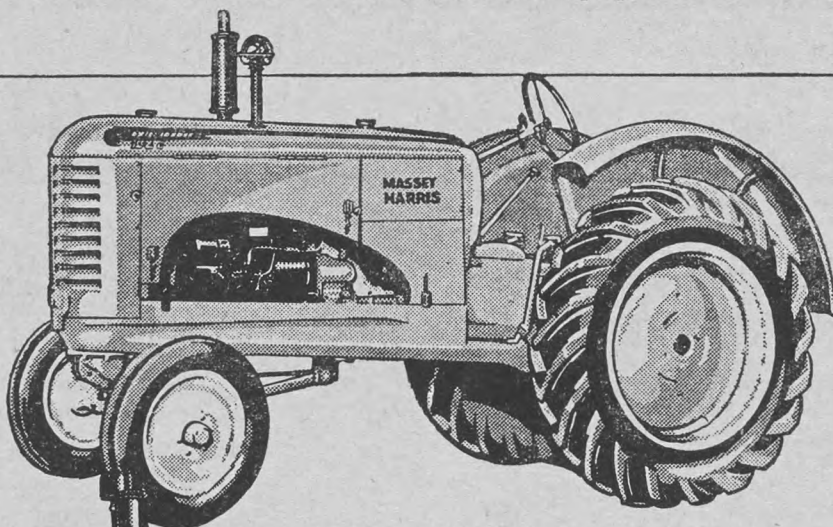
LOOK ahead five, ten, fifteen years. Can you keep on paying high wages and not getting a high enough return for your money? Are you going to continue to lose money through not getting your plowing, seeding, harvesting or threshing done before bad weather interrupts your work?

With a MASSEY-HARRIS tractor and

implements you can raise more crop with less help. You can get the necessary work done in those short, critical spells of fine weather. You can make extra money doing custom work for neighbors. And remember —when your tractor's not working, it's not eating. In the long run you'll have more money in your pocket if you farm with MASSEY-HARRIS' equipment.

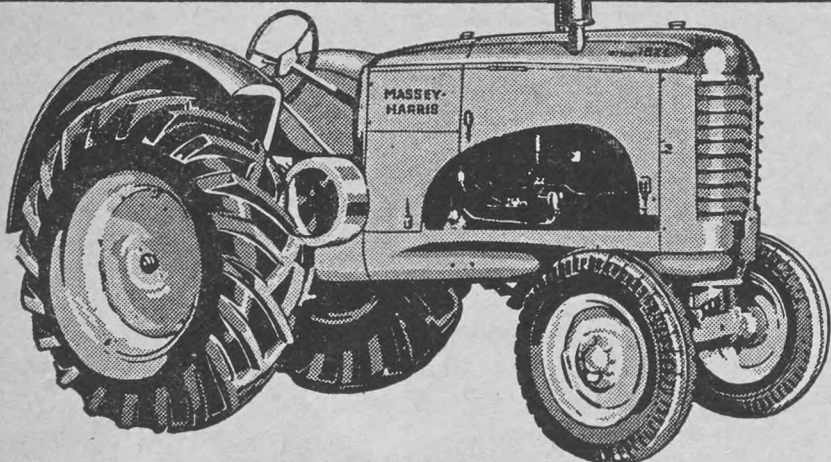
MASSEY-HARRIS 102G JUNIOR TRACTOR

This rugged, sturdy two-plow tractor represents a lot of tractor for the money. It is economical on fuel, oil and upkeep, Heavy-duty industrial four-cylinder engine. Full-pressure lubrication. Power take-off if desired.



MASSEY-HARRIS 102G SENIOR TRACTOR

This three-plow tractor with its six-cylinder Continental motor is the ideal tractor for medium and large size farms. Gives economical power for field or belt work. Heavy duty transmission and sturdy differential are built to give long service with low upkeep cost.



MASSEY-HARRIS COMPANY LIMITED

Established 1847

TORONTO MONCTON BRANDON SASKATOON YORKTON EDMONTON
MONTREAL WINNIPEG REGINA SWIFT CURRENT CALGARY VANCOUVER

right size floats off straws, unthreshed heads, white caps and oversized seeds. The lower screen allows weed seeds and cracked grain to drop through. A controlled wind flap will remove light and shrunken seeds.

"If a fanning mill is used, coarse screens may be used for the first screening operation. In this way, the fanning mill will serve mainly as a scalping machine, for removing coarse trash and most of the weed seeds. When the seed is put through the fanning mill for the second time, another set of screens can be used for separating the remaining weed seeds and small, shrunken or broken grains. In this way, the fanning mill is used as a seed grading machine in its second operation."

Seed Environment—What Is It?

SOME time ago an ad. brought to mind a problem I have often thought of writing about, crop failure or poor growth. This matter of lost top soil and erosion is only part truth. I believe there is another of much importance. I will call it seed environment. Perhaps agriculturists have something to learn yet about nature's designs. Specialists may know it, but I never noticed it stressed particularly.

In the drought years (they were bad economic years also) of the late nineties, I was a tenant on a rather hilly farm in old Ontario; and on, I believe, a farm that had been cleared and tilled for many years. All the hillsides were pretty well washed to the clay. It so happened that the landlord had put in the fall wheat before I rented and wished to harvest it on his own account. It was put in very dry, on fresh plowing, and at heavy cost for work. It got only very little start that fall and was too weak to stand the winter and rally in the spring, so I patched it up. One or two spots I left, as there was going to be a little. Some bare spots I cultivated, mostly on the hill faces, and sowed peas about the last week in May. I had sown 15 other acres likewise, but seed fell short, and some patches were left. During that dry summer nothing much grew on them. I used a spring-toothed cultivator maybe three times, on account of the irregular shape, and used the hoe to knock out a few thistles.

After cutting what bits of thin wheat there were and getting some pea straw, I decided to plow it all and sowed again to wheat. There was some moisture where the wheat came off, some where the peas were sown, but where I used the cultivator it was wet enough to ball up in the hand. This, as I said before, was hill face and apparently pure clay. Secondly, where the wheat was plowed, as I thought, just fine for sowing, where I cultivated, my somewhat dull share point started to skid around and I merely turned over some two or three inches of soil or clay. From this on it was all worked the same.

Now the result. The seed on the cultivating was up and away in short time, and by winter was covering the ground with a lush top, but where the bit of wheat crop was, it remained only thin and small. The result at harvest next year was a grand crop on the former and poor on the others. I concluded it must have been seed environment, moisture and solidity. Since that time I have practised a philosophy of firmness for the seed.

I've watched others operating and the results seem to bear out my conclusions. Some do it by shallow plowing or discing or cultivating. Some try to repack, if plowed deep, or fairly deep.

The problem of grass seeds (any small seeds for that matter) is worse than the larger grains. One can sow the latter fairly deep and the roots soon strike firm foundation, but if sown light on pulverized soil they may deteriorate for some reason. This reason I would like to know. Re small seeds of the grasses and clover. What's the reason those seeds take hold so well in the clay bottom of road ditches or gradings? Right at my door I have an object lesson. Some years ago I graded off a hill to get down a sidewalk and reduce the gradient on the roadway. Two or three feet came off the top and it's growing yellow and white clover, brome and other grass. I don't know the species. Last year I noticed a few plants of red clover getting a foothold and I'm transplanting them to see if they will multiply in my

garden. I know several places where the clovers and grasses flourish in rather small patches, nearly all where ditching or grading has been done, but I know of no areas where planned seedling down has been a success in a general way. So I ask myself, just why? Is it a fact that our top soil is not suited to catches of small seeds without some special handling? — Geo. Armstrong, Holmfield, Man.

Durum Resists Sawfly

OWING to the increase in the amount of damage to wheat crops from the wheat stem sawfly, there has been a substantial increase in the amount of Durum wheat seeded. This is due to the fact that Durums, which are macaroni rather than bread wheats, have a high degree of resistance to the sawfly. The Dominion Experiment Station at Swift Current points out that in years when moisture is plentiful, there will be practically no sawfly damage in Durum wheat, but in occasional dry years, there may be a considerable amount of damage, though it will be much less than in the case of bread wheats.

Because of this resistance, farmers who want to seed only bread wheats should be careful when offered sawfly-resistant seed. There are, as yet, no sawfly-resistant varieties of bread wheat available, though plant breeders have developed some strains which may be available in limited commercial quantities next year. Meanwhile, the Durums, which have a longer straw, are later in maturing, more susceptible to root rot, and yield less than the bread wheats under normal conditions, are experiencing a temporary popularity.

Pelissier, Mindum, and Carleton are the three important varieties of Durum wheat used in western Canada. Of these, Mindum is the standard for quality, and is eligible for a top grade of this type of wheat. A new variety, Carleton, is equal in quality to Mindum and has a particularly strong straw. This makes it preferable in areas such as parts of Manitoba where lodging frequently occurs. In southwestern Saskatchewan, Carleton does not yield as well as Mindum; and since there is very little lodging in that area, Carleton is not recommended. Pelissier is inferior to Mindum in quality and yields much better, especially in dry years.

Progress With Manitoba Sugar Beets

APPARENTLY sugar beet production in Manitoba is gradually shifting from the extremely heavy soil types to those containing a larger percentage of loam. The latter, having better water absorption and drainage, can produce crops which suffer less from late planting and heavy summer precipitation.

Of the 10,571 acres planted to sugar beets in Manitoba in 1945, fully two-thirds were planted after May 20, owing to the very late spring. Ninety per cent of the seed supplied was of the segmented type. This is planted in continuous rows and not only enables more efficient cross-blocking, but lessens the labor of thinning.

Last year, Japanese labor, together with 650 prisoners-of-war, supplemented local labor in the sugar beet fields in Manitoba. Prisoners-of-war were used to thin 1,950 acres and to harvest 2,400 acres. A total Manitoba yield of 82,154

tons gave an average per acre yield of 8.36 tons.

Costs of Production

WE are told from the Dominion Experimental Farm at Brandon that 16 Illustration and Sub-Station farms in Manitoba grew 1,000 acres of wheat, which averaged 25 bushels per acre, and cost 53 cents per bushel to produce. Cost included all cash and non-cash expense, covering everything from the use of land, buildings and capital, to man, machine and horse labor, interest, taxes, custom work, feed, seed, fertilizer, hail insurance and general expense.

The information collected from these 16 farms indicated that nine bushels of wheat covered the cost of raising a 24-bushel crop last year. Also, on 650 acres of barley yielding 30 bushels per acre and costing 44 cents per bushel, it took 18 bushels per acre to pay for the crop. In the case of oats, of which 500 acres were harvested, the yield averaged 47 bushels per acre and the cost was 30 cents per bushel. It took 22 bushels of the oat crop to pay for raising 47.

It was further reported that on three of the farms, the crop was taken off by using the swather and pick-up thresher. Horses supplied all of the power on only two farms. The balance used tractors and modern equipment. The costs varied widely between farms, due partly to variations in the methods of doing the work, and partly to differences in yields.

Spring Wheat for Southern Alberta

SOME figures recently given as to yield of wheat varieties from the Dominion Experimental Station at Lethbridge, indicate sharply the difference between irrigated and dry land farming. These figures, according to station officials, are more or less applicable to all of southern Alberta, since local tests conducted at a number of points in the southern part of the province during recent years, have given results very similar to those obtained at Lethbridge.

The Lethbridge figures cover the years 1939 to 1942 inclusive for both dry land and irrigated land. They indicate that the yield of hard red spring wheat on irrigated land is almost twice as much as on dry land. The yields of six varieties varied from 60.7 bushels to 69.14 bushels per acre, whereas on dry land, yields of the same varieties varied from 31.33 to 35.67 bushels per acre. Also, the heavier yielding irrigated wheat takes longer to mature. The time required for maturity of the same six varieties varied from 110.9 days for Red Bobs 222 on irrigated land, to 116.3 days for Canus; on dry land the variation in time required for maturity was from 103.5 days, in the case of Regent, to 107.2 days in the case of the Ottawa 15 strain of Marquis.

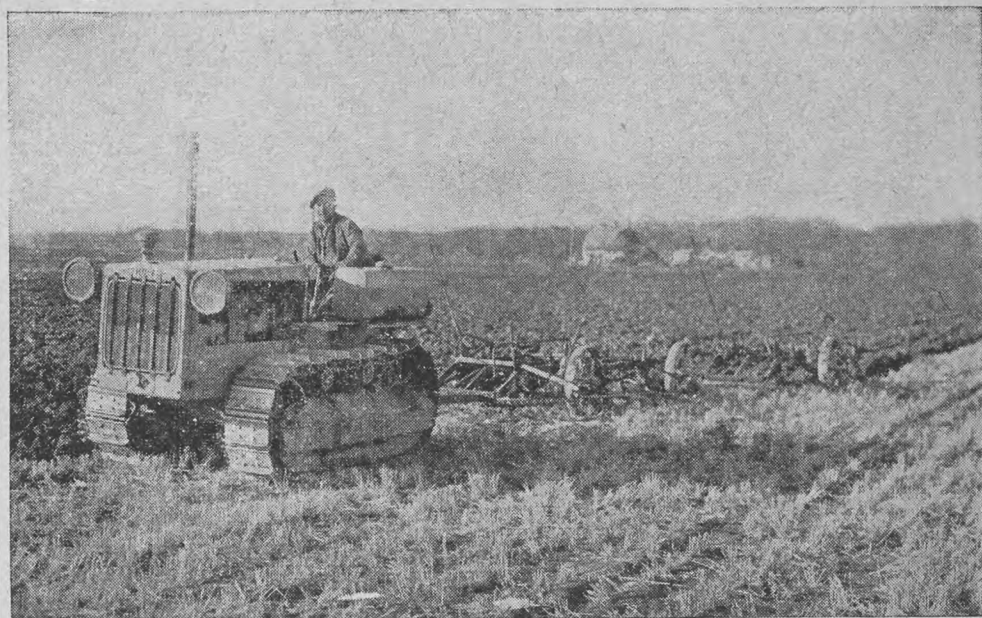
Comparing the six varieties, which were Reliance, Thatcher, Canus, Red Bobs 222, Marquis (Ottawa 15) and Regent, it is interesting to note that Reliance and Red Bobs 222 were the only varieties to hold the same placings as to yield, whether grown on dry land or irrigated land. On each type of land, Reliance was highest for yield, and required next to the longest period for maturity, whereas Red Bobs 222 was fourth as to yield and was tied with Regent for earliest maturity. Thatcher, which was second highest in yield on

DIESEL D4

saved its cost

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In March, 1936, C. T. Vaughan, Estevan, Saskatchewan, replaced two 20 h.p. spark-ignition wheel tractors with "Caterpillar" Diesel RD4 Tractor No. 4G392.

He put it to work, in season, doing general farm work: plowing, one-way disking, seeding and combining. In spare time, this RD4 kept busy doing Prairie Farm Rehabilitation work during 3 years.

And for several months each year, when not doing farm work, this machine's heavy-duty power and traction were helping build Rural Municipality roads.

Today, Mr. Vaughan's records show that his Diesel RD4 has done more than 24,000 hours of heavy work (equal to 24 years, at least, on the average Prairie Province farm). This Diesel has saved him twice its original cost, on operating expense, compared with the tractors it replaced—plus almost enough besides to pay its total repair expense!

There are plenty more "Caterpillar" Diesel Tractors that have done as many hours of heavy work as Mr. Vaughan's—to prove decisively what's in them and behind them!

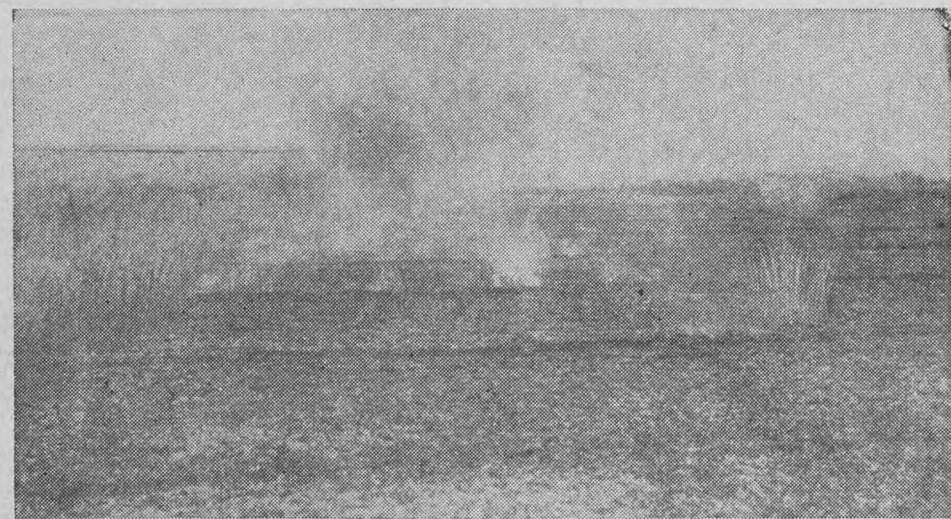
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Stubble burning to destroy weeds is sometimes practised in light land where weeds have been allowed to grow during the summer/fallow year. Increase in good farming and maintenance of soil fertility will cause this practice to disappear.—Photo: Scott Experimental Station.

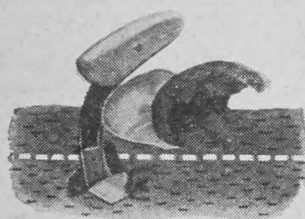
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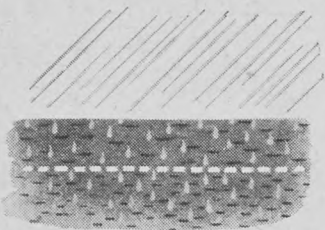


Oliver! A name long famous in plowing, now announces for the first time a new plow and a new plowing method. Not based on new and untried theories, the new Oliver "TNT" does what experienced farmers and soil experts have long wanted a plow to do—and with tractors now in service.



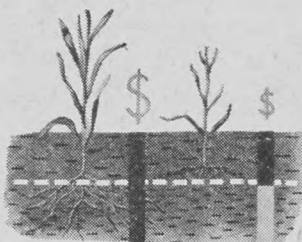
What the "TNT" DOES

The Oliver "TNT" turns the topsoil in the usual way but also breaks up the subsoil to an adjustable maximum of 4 inches of additional depth, and with only marginal mixing of the two layers.



Breaks up plow pan

Thus, "TNT" means goodbye to plow pan and the colloidal silt layer which blocks growing roots. Thus, water is permitted to penetrate deep into the subsoil to be stored for "dry spell" needs. Thus, "run off" is greatly decreased and the "TNT" becomes an important weapon in your fight against loss of topsoil by erosion. Thus, air is admitted to the soil to permit greater plant food intake.



Gradually deepens topsoil

High yield seed strains demand greater topsoil depth if plants are to be adequately fed and greatest profit realized. Oliver engineers purposely designed the "TNT" so that at each plowing a slight amount of subsoil is mixed in the bottom margin of the topsoil where it eventually becomes part of the humus layer. Thus, year by year, as you plow with the "TNT," you increase the production and value of your acres.



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dry land, was second lowest on irrigated land, and Regent, which was third highest on irrigated land, was lowest in yield on dry land.

Station authorities point out that no one variety is to be recommended as suitable for all conditions existing in southern Alberta. Where harvesting may be delayed after ripening, for example, Red Bobs 222 and Canus are undesirable, owing to their tendency to shatter. If harvesting weather is adverse, both Red Bobs 222 and Thatcher tend to bleach badly and are likely to grade low. Marquis, though tending to show up badly in yield comparison, is able to stand damage from wind or bad weather, and is likely to prove the most desirable variety under such conditions. Canus proved to be a relatively high yielding variety on both dry and irrigated land.

Soil Fibre from Grass Roots

ONE of the principal reasons why so much trouble has been experienced on the prairies from soil drifting or wind erosion is that land has been cropped year after year by owners or tenants who have made little or no attempt to return to the soil the fibre from the grass roots which originally were incorporated in it.

The turning over of the soil by constant cultivation and cropping destroys this vegetable matter which exercises a binding effect on the soil particles. The result is that the soil particles become finer and still finer with increasing cultivation, until at last they are blown away by winds, which, in well-kept soils, would do no harm whatever.

Repeated and disastrous experiences have by now taught many farmers the advisability of introducing some form of crop rotation into their lands which involves the use of grass crops to restore fibre to the soil. Unfortunately, on many parts of the prairies, comparatively dry conditions limit the kinds of grasses that can be used successfully. Fortunately, however, as pointed out by the Dominion Experimental Station at Lethbridge, our most drought resistant grasses, especially crested wheat grass, produce a large quantity of fine, tough roots. Brome grass occasionally dries out in dry years, and the roots of brome are coarse and heavy by comparison with crested wheat grass. Slender wheat grass, or western rye grass, has a poorer root system for control of erosion.

At Lethbridge, root fibre samples were taken from a series of grass plots that had been broken up 18 months before, and had since been maintained as summerfallow. It was found that when a cubic foot of soil from each plot was taken and all the roots extracted and oven dried, there were 8.12 grams of roots in the crested wheat grass sample, 1.96 grams from the brome grass plot, 1.40 from the slender wheat grass plot, 1.68 from alfalfa and only .28 grams from a plot on which wheat and fallow had been used without any grass or legumes to restore fibre to the soil.

Moreover, it was significant that on the crested wheat grass plot 75 per cent of the root fibre was in the upper six inches of soil.

Common Ragweed

RAGWEED is a very common weed. It is not very difficult to eradicate. At the same time, it has its peculiarities.

Science Service, Dominion Department of Agriculture, has called attention in its recent annual report to the fact that after-harvest cultivation, which is so commonly used to induce germination of weed seeds in order that they may be killed by further cultivation, does not control ragweed in the usual way.

Actually, the seed of common ragweed germinates the following April. Only a very small percentage of ragweed seed germinates in the following years; and the percentage which germinates a year after it falls to the ground, varies according to the conditions in which the seed finds itself. Thus, seed lying on top of sod germinates to the extent of 13.4 per cent, whereas 24.3 per cent of the seed lying on top of the soil will germinate. If the seed is buried one-half inch deep, 62.4 per cent will germinate; one inch deep, 57.7 per cent; two inches deep, 36.7 per cent; three inches deep, 3.2 per cent; and four inches deep, only one per cent.

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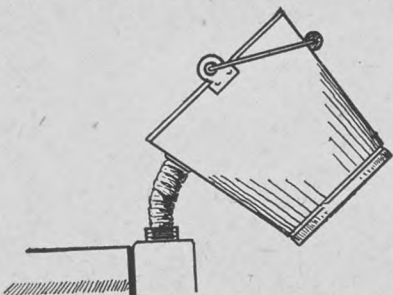
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A Few Suggestions for the Handyman

Both for inside and outside use

Water or Gasoline Pail

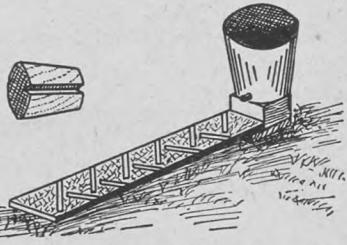
A serviceable water or gasoline pail can be made by cutting a hole in the side near the top of a pail. A piece of flexible metal hose or a 3-inch length of 1-inch galvanized pipe is soldered on



at the hole. If the pail is intended to be used only for filling radiators with water, the metal hose or pipe can be omitted and the water allowed to flow through a hole near the top of the pail. This hole should be from 1 inch to 1½ inches in diameter, depending on the size of the radiator opening.

Water Supply for Bees

A wooden pail or a small barrel, or any other suitable water container, plus a sloping board covered with burlap, can be used to make an ideal means for supplying water for bees. The water container is fitted with a grooved plug in the side near the bottom. The groove should be made just large enough to



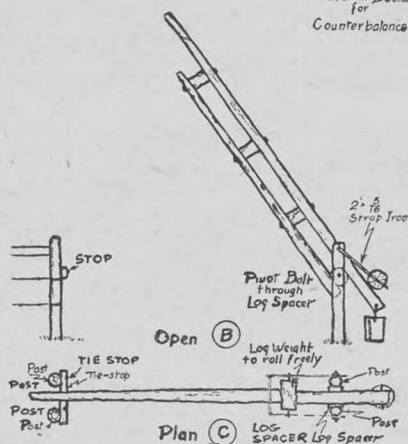
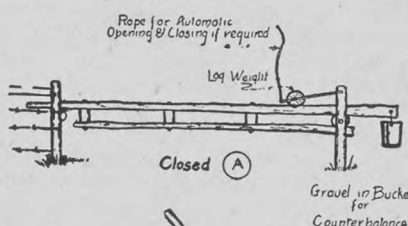
allow water to drip slowly on to the burlap covered board. The burlap is held on the sloping board with small wood cleats arranged as shown in the sketch so as to retain the water on the board.

Locking a Nut

Have you ever had trouble with a nut that persisted in becoming loose? Try sawing a slot in the threaded end of the bolt and then spread the split end with a hammer and cold chisel. If the nut is to be removed later, close the two halves as near together as possible without damaging the threads, then turn off the nut. As the nut is turned off the split ends will be forced together again.



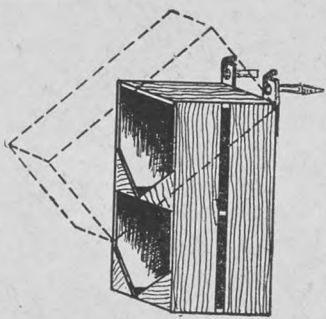
Cantilever Gate



A simple automatic opening and closing gate. The rope attached to the weight is carried through pulleys on high posts and the end drops down where it can be reached from a vehicle. Three views of the gate are shown.

Nest from Apple Box

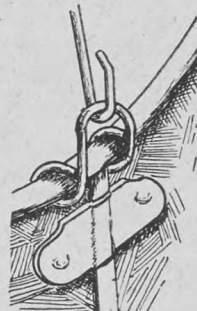
An economical, easily cleaned poultry nest is readily made from an apple or orange crate. The bottom boards are removed leaving only the two sides, the two ends and the centre boards. Angle pieces are cut from the bottom boards and nailed to the front as shown in the



sketch. The angle pieces prevent the birds from roosting on the front of the nest. Two pieces of ¾x1½-inch strap iron are fastened to the back to serve as hangers. A ⅝-inch hole in each piece of strap iron allows the nest to be hung on two hooks screwed into a wall. The nest thus hinged can be swung out from the wall to allow litter to fall out. The nest can also be easily lifted off to permit more thorough cleaning.

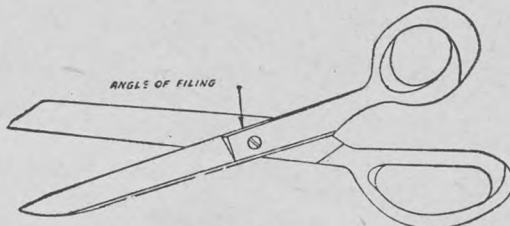
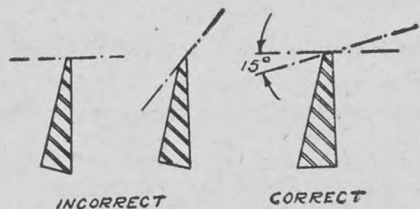
Repair for Pail Handle

When the handle lug of a pail breaks drill two ¼-inch holes just below the rim of pail about 1¼-inches apart. Bend a piece of ¼-inch round iron into a "U" shape so that the space between the two arms of the "U" is one inch. Then turn the two ends to partly form two eyes, about 1 inch in diameter to complete the repair link. Place the repair link on the handle of the pail and then slip the ends of the open eyes through the two ¼-inch holes in the pail. Now the two eyes can be closed with a hammer to complete repair.

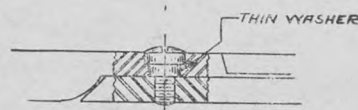


Sharpening Shears

Sharpening shears or scissors is not a difficult job. A good, sharp, fine-toothed flat file and ordinary good care are the chief requirements. Secure the shears firmly in a vise in a horizontal position. Light, firm, even strokes in the cutting direction are required. Lift the file at the end of each cutting stroke. Do not draw the file backwards on the shear edge before applying the next stroke. Drawing the file backwards will dull both the file and the shear. The cutting edge of the shear blade must be



filed at the correct angle, which is about 15 degrees. This is often indicated by a bevel near the screw as shown in the sketch. Do not file away any more metal than is necessary. If the shear blades are loose due to wear of screw seat, place a very thin washer below the head



of the screw, sufficient to take up the slack. Do not attempt to remedy loose scissor blades by undue tightening of the screw, unless the screw is simply loose.

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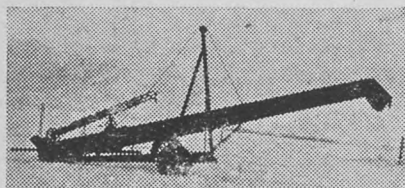
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100	50	25	100	50	25
15.75	8.35	4.45	W. Leg.	14.25	7.60 4.05
31.50	16.25	8.40	W.L. Pull.	29.00	15.00 7.75
4.00	2.50	1.50	W.L. Ckls.	3.00	2.00 1.00

Regina "RR" Approved			Regina Approved		
16.75	8.85	4.70	N. Hamps.	15.25	8.10 4.30
29.00	15.00	7.75	N.H. Pull.	26.00	13.50 7.00
16.75	8.85	4.70	B. Rocks	15.25	8.10 4.30
29.00	15.00	7.75	B.R. Pull.	26.00	13.50 7.00
11.00	6.00	3.25	Hvy. Ckls.	10.00	5.50 3.00

Guaranteed 100% live arrival. Pullets 96% acc.

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REGINA 1757 HALIFAX ST. SASK.

R.O.P. SIRED

White Leghorns — Barred Rocks

APPROVED

New Hampshires and
Leghorn-Hamps. crosses

Order Chicks Early

Write for our Annual Catalogue and
1946 Price List.

J. H. MUFFORD & SONS
Box G MILNER, B.O.



POULTRY

Conducted by
Prof. W. J. RAE
University of Saskatchewan



[Photo: Dom. Dept. of Agr.]

In 1945, there were 23,073,602 chicks hatched in western Canada from 35,139,578 eggs, or 62.8 per cent. Of the total, 177,851 chicks were R.O.P.; 8,338,958 were R.O.P.—sired; 14,203,978 were from approved flocks; and 352,815 (all B.C.) were hybrid. Over five million hybrid chicks were hatched in eastern Canada (80 per cent in Ontario).

Object: High Quality—Low Cost

At the present we are in a transition period between war and peace. Perhaps it is a good time to consider the future of our industry. During the war years as well as now we have had a very favorable market for both eggs and meat, due partly to a high national income and also to less competition because of meat rationing. Such a situation will not last indefinitely, hence it would be well to consider just how we might improve our position on the market when competition is more keen.

Our first consideration must be quality. We must have a product which appeals to the public. Eye appeal is often responsible for the initial sale but success depends upon repeat orders. How is this best accomplished? First by having an attractive product, whether it be eggs or meat; and secondly by having a top quality product at all times. Another very important consideration is price. To be competitive our products must give the consuming public as much if not more for their money than other similar products.

To be able to accomplish this our costs of production must be reduced. Proper care and management of our growing stock throughout the spring and summer months is essential if we are to be in a position to place a large number of our pullets in the laying house next fall. They may be well grown, in good health and free from disease. From then on the best possible management practices must be followed if quantity and quality of eggs are to be achieved. The cockerels must be properly finished before marketing if top prices are to be realized.

Get Ready—The Chicks Are Coming

It is not too early to think of your chicks and begin to prepare for their arrival even though that day may be some weeks away. Too often the smaller jobs are left until the last moment and then it may be too late because of the lack of some necessary piece of equipment. The interior of the brooder house should be thoroughly scraped, cleaned, and washed with a disinfectant such as lye. The brooder stove must be checked to make sure it is in good working order; stove pipes, too, need attention.

The house will be damp and cold after cleaning, but by setting up the stove a week or so before the arrival of the chicks, an opportunity will be available for a thorough check-up of the stove and at the same time the heat will dry out the house. Next inspect the ventilating system, making sure that the windows will open and close with ease. Now test your thermometer against a clinical or other reliable instrument. If more than a degree out, purchase a new one. The thermometer should hang on the outer edge of the canopy about two inches from the floor. The required temperature for the first week is 95-100 degrees; reduce it five degrees each week until supplemental heat is no longer required.

The chicks themselves are the best indication of the proper temperature. If they form a ring around the outer edge

of the canopy when resting, the temperature is just right. If huddled close together, it is too cold and if they are spread out, it is too hot. When the chicks arrive they will be thirsty after their trip from the hatchery; give them a drink by dipping their beaks into a cup or bowl of warm water. Place them under the brooder and make sure that a good chick starter is easily accessible along with an ample supply of water.

Feeding Affects Hatchability

We all realize that a well balanced laying mash properly supplemented with whole grains will aid materially in the production of high quality eggs. However, such a feeding program will prove of little value during the hatching season.

The egg is truly a remarkable structure, for it contains all the necessary ingredients for the development of the chick. The hen must receive those ingredients in her diet if the eggs are expected to hatch. The main difference between a laying and breeding mash is its vitamin content, particularly vitamins A, D and riboflavin. Fish oils are excellent sources of vitamins A and D; green feeds, bright in color and low in fibre are good sources of vitamin A. Riboflavin, formerly called vitamin G, is contained in liquid milk, dried milk, dried buttermilk, green feed and to some extent in such products as fish and meat meals. Synthetic riboflavin is the richest source of this vitamin.

The breeding stock should be fed a hatching mash at least one month prior to saving eggs. That is the minimum amount of time required by the hen to transfer, in quantity, the necessary amounts of these vitamins into the eggs. Just a word of caution—when changing from a laying to a breeding mash, do so gradually, as a sudden change of feed will often throw the hens out of production. A difference in color, taste or texture is readily apparent to the birds. Finally, control the amount of whole grain fed. Too liberal a feeding of the whole grains dilutes the vitamin content of the ration. The usual recommendations are 12 to 14 pounds per day per 100 birds, depending upon the rate of production and breed.

Poultry Manure

A BY-PRODUCT of a poultry flock is manure. Its value is often not appreciated by either the general farmer, or the commercial poultryman. This by-product is valuable fertilizer containing nitrogen, phosphoric acid and potash, each necessary for good plant growth. Under normal conditions, one hundred hens will produce between five and six thousand pounds of manure per year. This ought not to be wasted on the manure pile. Since this fertilizer is rich in nitrogen, it should be treated so that the maximum nitrogen is retained. Peat moss or sand mixed with the manure are both good preservatives. Lime is not a good preservative, because the lime liberates ammonia, which contains the nitrogen. Dry the manure thoroughly and then spread thinly over the land.

HAMBLEY CHICKS For '46

Be sure of delivery when you want your 1946 chicks. Order TODAY. Send payment in full or small deposit.

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R.O.P. Sired			Approved		
100	50	25	100	50	25
15.75	8.35	4.45	W. Leg.	14.25	7.60 4.05
31.50	16.25	8.40	W.L. Pull.	29.00	15.00 7.75
4.00	2.50	1.50	W.L. Ckls.	3.00	2.00 1.00

Hambley Spec.			Approved		
16.75	8.85	4.70	N. Hamps.	15.25	8.10 4.30
29.00	15.00	7.75	N.H. Pull.	26.00	13.50 7.00
16.75	8.85	4.70	B. Rocks	15.25	8.10 4.30
29.00	15.00	7.75	B.R. Pull.	26.00	13.50 7.00
11.00	6.00	3.25	Hvy. Ckls.	10.00	5.50 3.00

F.O.B. CALGARY, EDMONTON

R.O.P. Sired			Approved		
16.00	8.50	4.25	W. Leg.	14.00	7.50 3.75
31.00	16.00	8.00	W.L. Pull.	29.00	15.00 7.50
3.00	2.00	1.00	W.L. Ckls.	3.00	2.00 1.00

Hambley Spec.			Approved		
18.00	9.50	4.75	N. Hamps.	16.00	8.50 4.25
29.00	15.00	7.50	N.H. Pull.	27.00	14.00 7.00
10.00	5.50	3.00	N.H. Ckls.	9.00	5.00 3.00
18.00	9.50	4.75	B. Rocks	16.00	8.50 4.25
29.00	15.00	7.50	B.R. Pull.	27.00	14.00 7.05
11.00	6.00	3.25	B.R. Ckls.	10.00	5.50 3.00

F.O.B. ABBOTSFORD, B.C.

R.O.P. Sired			Approved		
16.00	8.50	4.25	W. Leg.	14.00	7.50 3.75
32.00	16.50	8.25	W.L. Pull.	29.00	15.00 7.50
4.00	2.50	1.50	W.L. Ckls.	3.00	2.00 1.00

Hambley Spec.			Approved		
17.00	9.00	4.50	N. Hamps.	15.00	8.00 4.00
31.00	16.00	8.00	N.H. Pull.	28.00	14.50 7.25
10.00	5.50	2.75	N.H. Ckls.	8.00	4.50 2.75

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White Leghorns, unsexed	14.25	7.60 4.05	White Leghorns, unsexed	14.25	7.60 4.05
Pullets	29.00	15.00 7.75	Pullets	29.00	15.00 7.75
Cockerels	3.00	2.00 1.00	Cockerels	3.00	2.00 1.00
Rocks, Hampshires, unsexed	15.25	8.10 4.30	Rocks, Hampshires, unsexed	15.25	8.10 4.30
Pullets	26.00	13.50 7.00	Pullets	26.00	13.50 7.00
Cockerels	10.00	5.50 3.00	Cockerels	10.00	5.50 3.00
White Rocks, unsexed	16.25	8.60 4.55	White Rocks, unsexed	16.25	8.60 4.55

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March to May 25th			100 50 25		
100	50	25	100	50	25
Rocks, Hampshires, unsexed	16.75	8.85 4.70	Rocks, Hampshires, unsexed	16.75	8.85 4.70
Pullets	29.00	15.00 7.75	Pullets	29.00	15.00 7.75
Cockerels	11.00	6.00 3.25	Cockerels	11.00	6.00 3.25

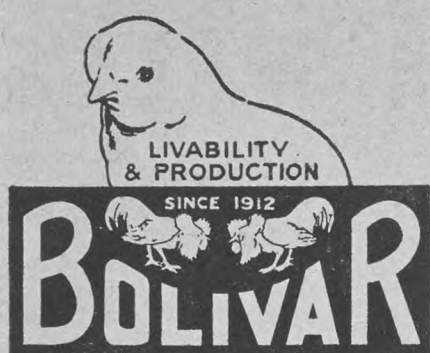
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Large type Leghorns, unsexed			15.75 8.35 4.45		
100	50	25	100	50	25
Pullets	31.50	16.25 8.40	Pullets	31.50	16.25 8.40
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N.H. Pullets	26.00 13.50	24.00 12.50
Heavy Breed Chks.	10.00 5.50	10.00 5.50

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B.R. Mixed	16.75 8.85	15.75 8.35
B.R. Pullets	29.00 15.00	27.00 14.00
N.H. Mixed	16.75 8.85	15.75 8.35
N.H. Pullets	29.00 15.00	27.00 14.00
Heavy Breed Chks.	11.00 6.00	11.00 6.00

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W.L. Mixed	15.75 8.35	14.75 7.85
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Saskatchewan's Poultry Congress

It was something to talk about. Here is a bird's-eye view

By J. R. CAVERS
University of Manitoba

ALL roads led to Regina when Saskatchewan's first Poultry Congress drew a 1,200 attendance for the three-day session, January 8-10. Sixty per cent of those registered were farm poultry raisers from all parts of the province. The Saskatchewan Poultry Board sponsored the Congress, with Walter Blennerhassett on loan from Ottawa as Secretary-Manager. Leaders in various phases of the industry from both sides of the border faced overflow audiences at every session. They stressed efficiency and quality of production, in line with the "pride and profit" slogan of the Congress.

The Congress was unique in several ways. Poultry meetings usually cater to the producer element, but this one netted 700 bona fide farm flock owners, which is something of a record. Visitors from other provinces took careful note of such publicity methods as the "Producer Miles" competition. The province was zoned in six parts and each grower got one point per mile travelled to the Congress. The southwest corner won, with some 20,000 producer miles. Nevertheless, interest in the industry, present and future, plainly served as the main drawing feature.

"The honeymoon is over," Dr. Carpenter of Chicago told the gathering, as he discussed the transition from sellers' to buyers' markets for poultry products, "and there is only one boss for all of us, the consumer." Fourteen cents of the U.S. housewife's dollar now goes for poultry and eggs, compared with nine cents prewar, and housewives are shrewd customers. Carpenter is the popular U.S. poultry industry mouthpiece, who headed Washington's wartime efficiency and flock livability program. Now he is President of the Institute of American Poultry Industries, a wide-awake packer group with sights set on the future.

Canada's markets for future surplus poultry products, for very good reason, gave place to other matters during the Congress. The chief of poultry marketing services, W. A. Brown of the Dominion Department of Agriculture, is now overseas with Canada's trade mission. Mr. Brown sent a recorded message to Regina explaining the nature of the trip. Producers were content to await the outcome of the mission, remembering the good work done by the Special Products Board during the last four years. Recent reports from the overseas party appear to justify this confidence. J. L. Croome of the British Food Mission, Ottawa, reviewed Canada's exports of livestock products.

Pep Talks

Purely day-to-day problems with the chicken flock became pointed and colorful when Jack Frazer, poultryman of Ontario's Agricultural School at Kemptville, took the platform. Indeed, he caused nearly as much commotion as the lusty roosters crowing all night in the Hotel Saskatchewan basement. Producers showered him with questions and found plenty of meat in the answers to all sorts of management problems. Evidently, cowpunching near Calgary 30 years ago proved no handicap to Jack in his present pursuit—talking to farm groups in their own language on technical poultry topics.

"The author of the turkey book," was the introduction given to Stanley Marsden of the U.S.D.A., Beltsville, Maryland, and nearly everyone knew him right away. Speaking in Canada's top turkey-producing province, Mr. Marsden displayed a common sense understanding of the business to an eager multitude of growers. Tracing developments in the States to the present record turkey population, he gave many kindly warnings to a growing Canadian industry. "Turkeys and chickens simply don't mix," he emphasized, "once you step up from dozens to hundreds of poulters"—referring to risk of Blackhead disease. Commenting on the obvious advantages of range and feed for turkeys here on the prairies, Mr. Marsden told questioners that confinement rear-

ing is not a more economical method of growing turkeys.

A former Ontario farm boy, and for many years poultryman with Ohio State University, Professor C. H. Ferguson was right at home with Saskatchewan poultry keepers and their problems. Housing and management were his topics, both talks being beautifully illustrated with colored slides. "Fergie," as everyone soon called him, is really full of ideas for saving labor on the poultry plant, and many notes were taken as he spoke. Growing very early pullets for summer and fall egg production, then dressing them for market, is an Ohio scheme that provokes some thought in this part of Canada with its winter-spring deluge and summer-fall famine of fresh eggs. But they still must grade as young poultry rather than fowl to make it profitable, he pointed out. From his pleasant and able manner of getting across his ideas, it is easy to see why Ferguson is often rated as the leading poultry extension worker in the U.S.A.

From Chick to Chick

Local problems in chick feeding, breeding and feeding for increased hatchability, were dealt with by university speakers from Saskatoon and Winnipeg. These talks and those of specialists in charge of federal poultry breeding policies, will appear in the Congress report. Consumer education on the use of eggs and poultry, demonstrated by Miss Laura Pepper of the Dominion Department, held the interest of Regina housewives, as well as the many farm women present at the Congress.

Owners of approved flocks of chickens and turkeys were given a picture of experimental work leading up to present feeding practice for breeding birds. Hatchability depends on many factors, but the one most easily controlled by the flock owner, is the diet. Shortage of dried milk for commercial concentrates has been met successfully by the use of synthetic riboflavin the last three seasons. But prairie hatches still lag behind the average of other provinces, calling for further effort to correct deficiencies in feed for breeding flocks.

Last feature on the program was the question-box, with a dozen hard-working specialists on the platform to provide answers. These came from the microphone in rapid succession for over two hours; yet nearly 150 questions remained unanswered when time came for the Congress to close. A full convention hall of 700 people applauded a suggestion to continue, but plainly a second Saskatchewan Poultry Congress will be needed to satisfy the interest displayed at Regina. Meanwhile, other provinces are giving thought to the methods used and results obtained by the Saskatchewan Poultry Board in this highly successful undertaking.

Feeds Consumed By Layers

THE average consumption of all solid feeds per bird is about five ounces daily and the average weight of fluid consumed daily is six to seven ounces in winter and considerably more in warm weather. To meet the needs of 100 laying birds for 12 months the following quantities of feed would be needed; wheat 75 bushels, barley 46 bushels, oats 65 bushels, meat meal or concentrate 600 pounds, charcoal 100 pounds, fine salt 36 pounds, pilchardene oil or cod liver oil three gallons, dried alfalfa leaves 60 pounds, grit 120 pounds, and oyster shell or other high calcium mineral 350 pounds. During the year over 2,000 gallons of liquid would be consumed. The quantities of feed quoted are sufficient to meet the average needs of birds laying 50 per cent and maintain or increase body weight. Feed consumption varies slightly with the different breeds, and varies also with the age of the birds and the number of eggs being laid. During cold weather feed consumption is higher than during periods of moderate temperatures or when the weather is warm.

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Our overseas markets are calling for increased egg shipments in the early Fall. That means more February and March R.O.P. sired or Approved chicks should be ordered now. Our excellent selection of breeding stock assures you of high quality chicks.

1946 Alberta Chick Prices

Per 100 to May 17th	R.O.P. Sired	Ap- proved
W. Leghorns	\$16.00	
Leghorn Pullets	31.00	
N. Hamps, Rocks, Reds	18.00	\$16.00
N.H., Rocks, Red Pullets	29.00	27.00
Leghorn Cockerels	3.00	
Heavy Cockerels	9.00	9.00

For B.C. prices write our Chilliwack Hatchery. Our 1946, Fifteenth Anniversary Year, Catalog and Flock Record Book mailed on receipt of order or on request.

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Each unit broods successfully up to 150 chicks 6 to 8 weeks on as little as one gallon a week of kerosene. You can brood as many chicks as you desire by having more than one unit.

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U.F.A. and A.F.U. Move Closer Together

Alberta Farm Organizations take preliminary steps toward amalgamation

FOUR years ago the United Farmers of Alberta and the United Farmers of Canada, Alberta Section, met by prearrangement, in concurrent conventions at Edmonton. They even got together in a joint meeting in which they expected to merge their forces and emerge as one body. The attempt failed. Negotiations were continued, however, and last month, at the U.F.A. convention in Calgary, the final step was taken in the preliminary phase of another move toward amalgamation.

There is some interesting history behind this step. Most of it has been already recorded in these columns, but a brief resume may be welcomed. In 1937 a farmers' strike was staged in a section of Alberta east of Edmonton. The immediate cause was trouble over grades. Picket lines were formed. At least one load of wheat, which was being driven by a Mountie, was tipped over. The voltage was high, but no serious lawlessness occurred. It was the only application of direct action in the history of grain marketing in western Canada. Out of this trouble an Alberta Section of the United Farmers of Canada was formed in 1938. The organized farmers of Alberta had become a house divided; and the Edmonton meeting was an attempt to heal the breach.

It failed for various reasons. Passing by a lot of details, some of which are as well forgotten, the net result was that the United Farmers of Canada, Alberta Section, changed its name to the Alberta Farmers Union; the U.F.A., in its resumed convention, instructed the Board to appoint a contact committee to resume negotiations, with amalgamation as the ultimate aim, and the new A.F.U. appointed a similar committee with instructions to seek amalgamation.

Since then two committees have been meeting. After some initial fireworks, they found that they were beginning to see more or less eye to eye on more and more things. Gradually they got around to the point where they were agreeing about 100 per cent. The result was that a resolution was drawn up to be presented at full conventions of the two organizations and, since the Alberta Federation of Agriculture had come into the picture, at a convention of that organization as well. It was agreed that the resolution, to become effective, would have to be adopted without revision or amendment at all three conventions.

The resolution was as follows:

"Whereas, the Canadian Federation of Agriculture is a national organization with a provincial unit in every province, and

"Whereas, in the interests of agriculture there should be only one farm organization in Alberta.

"Therefore, be it resolved, that the Alberta Federation be reorganized to provide for the merging of the United Farmers of Alberta and the Alberta Farmers' Union on the following general principles:

"1. Provide for the setting up of locals on a direct membership basis.

"2. An annual convention composed of delegates of locals and affiliate organizations.

"3. The direct membership organization to elect the majority of the board of directors.

"4. To provide for a women's section.

"5. To provide for a junior section.

"6. The organization to be non-political.

"Be it further resolved, if the other two organizations concerned agree to

these principles, this convention authorize its board of directors to proceed with the preliminary steps for amalgamation by (a) setting up a committee to continue negotiations with the other two organizations, and

"(b) calling of a special convention to ratify amalgamation and elect six members to a provisional board to carry on the work until the first annual convention of the new organization."

This resolution has now been adopted by the three organizations. It should not be assumed by that, however, that amalgamation has been achieved. What the organizations have done is to approve the general principles of a plan on

which amalgamation can be based. A vast array of detail remains to be worked out. That will take time. It may be a couple of years before the amalgamated organization meets in its first duly constituted convention. The disposition seems to be to proceed judiciously and take whatever time is necessary to arrive at sound agreements. It isn't wise to be in too big a hurry. They were in a hurry in 1942 and the move blew up.

One of the difficulties to be resolved concerns the assets of the U.F.A. They are not to be sneezed at either. The report of the U.F.A. Central Co-operative Association, presented at the convention, showed a

book surplus of nearly a quarter of a million dollars after depreciation had been adequately taken care of. Total sales for the year were \$2,841,687.20. Steps were taken to have the U.F.A. Co-op. established as a separate organization, when a resolution was adopted to petition the legislature for an amendment to the Act of Incorporation changing the name United Farmers of Alberta to United Farmers of Alberta Co-operative Limited.

By this plan the United Farmers of Alberta and the Alberta Farmers Union will both lose their identity. They will disappear into the Alberta Federation of Agriculture. This latter organization grew out of The Co-operative Council of Alberta, formed about 10 years ago, whose object was to co-ordinate the activities of the various co-operatives of the province. It had representation on the Canadian Chamber of Agriculture which in 1938 became the Canadian Federation of Agriculture. At that time the Alberta organization also changed its name and became the Alberta Federation of Agriculture. It also took into its membership the other farmers associations along with the co-operatives, but remained a Federation, with no direct membership. The combined membership of all its affiliates is in the neighborhood of 80,000.

If and when amalgamation is achieved it will alter fundamentally the Alberta Federation of Agriculture. At present it is a federation of existing farmers' organizations. The plan calls for the setting up of locals on a direct membership basis. This means that the existing locals of the United Farmers of Alberta and the Alberta Farmers Union would become locals of the Alberta Federation of Agriculture.

Once before in Alberta rival farmers' organizations joined forces. Years ago the Alberta Farmers' Association and the Society of Equity came together to form the United Farmers of Alberta. From that union a powerful organization grew up. At one time the U.F.A. had a membership of close to 40,000. An even more powerful organization should follow the present move to close their ranks and present a united front by the organized farmers of the sunny province.



G. E. CHURCH
Re-elected president of the United Farmers of Alberta.

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NEWS OF AGRICULTURE

Continued from page 12

ing and selling all livestock and carcass products designed for human consumption and that all live and dressed poultry and eggs in the shell be subject to the jurisdiction of the Board, in the above manner.

"FURTHER BE IT REQUESTED that the Board be empowered to make such a levy on the products under its jurisdiction as may be necessary to defray the cost of the Board's operations."

Other livestock resolutions dealt with the opening of the American market to Canadian cattle, and a long term livestock policy with floor prices for not less than five years.

Several resolutions on grain marketing were passed. The convention went on record as favoring the establishment of the Canadian Wheat Board as the sole marketing agency for cereal crops; the settlement of price levels by international agreement; the retention of the quota system of grain delivery; the transfer of the excise tax from malt to beer, and the correction of the present situation by which the tax on malt amounts to \$5.76 for each bushel of barley used, part of which would go to malting barley producers; the correction of a situation in which millers get a drawback of 47½ cents a bushel on wheat at \$1.25 while the wheat grower, after losing his money helps pay the drawback in his taxes.

British Food Contracts

HON. James G. Gardiner announced from London on January 24 where he and Hon. James MacKinnon, Minister of Trade and Commerce, have been heading a Canadian trade mission, that practically all food contracts between Canada and the United Kingdom will be renewed and extended.

Specifically, Canadian bacon and beef contracts, which expire at the end of this year will be renewed, and the egg and cheese contracts, expiring later, are also to be renewed. Mr. Gardiner was quoted as having said that "the United Kingdom wants in particular all the bacon and beef she can get from Canada for some time to come."

The Minister of Trade and Commerce, on the same day, disclosed the fact that the United Kingdom will take 200 million bushels of wheat each year during the next two years, at the current Canadian export wheat price of \$1.55 per bushel. It was announced that the two-year agreement was only an interim agreement, and that long-term contracts were expected, which would extend the agreement for several years.

Canadian wheat will be paid for, according to preliminary reports, by export of British goods to Canada. The price of \$1.55 was not being written into the contract, and might be varied from time to time.

A Russian Poultry Farm

IN Russia, things are done in a big way. An account of a Russian poultry farm

modelled on a large poultry farm in the United States, indicates that it covers an area of 7,530 acres and carries a population of about 150,000 hens and chickens and 12,000 ducks. It produces about 7½ million eggs and 150 tons of dressed poultry per annum. At one time the population was 250,000 hens and chickens, 14,000 ducks and 14,000 turkeys, but in July 1941 the farm was bombed and between bombs, high explosive shells and incendiaries, about half of the large buildings were destroyed, together with over 100,000 poultry.

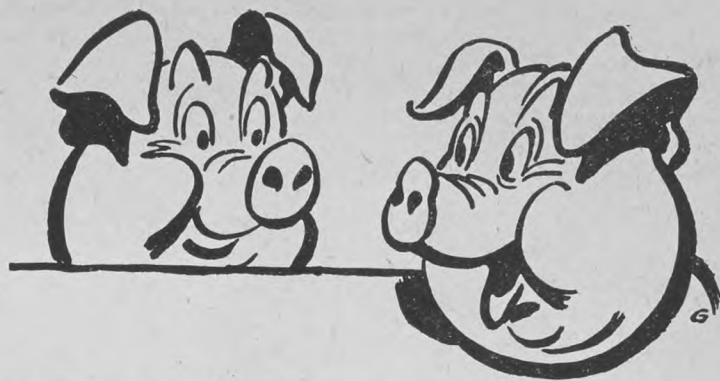
The farm employs 1,250 workers and three 50,000-egg-capacity incubators make it possible to incubate 150,000 eggs at a time. Large two-storey brick buildings, well lighted with natural light, are used for housing the fowl and young stock on a very intensive system. The pens are wire constructed and are in layers two high, approximately three feet long by 2½ feet wide by 2½ feet high, accommodating ten birds. Women take the eggs from the pens with a hooked stick, placing them in buckets from which they are packed straight into boxes after dating. The fowls are self-fed mash, together with green sprouts, which are grown in trays close to pens.

A large open range contains breeding pens, of which one section alone contains 10,000 hens. All the fowl are White Leghorns. Except for the breeding pens, the buildings are centrally heated in the winter, but in the breeding pens electric light is installed for winter use. In lieu of artificial heat, the floors of the breeding pens are covered with hay. Chicks are sexed at 41 days and all chickens are reared irrespective of sex. Entrails from dressed poultry and dead poultry are fed to silver foxes maintained in one large section separated from the balance of the farm.

Cash Farm Income

IN 1945, just over 50 per cent of Canada's cash farm income was received in the three prairie provinces, and just over 55 per cent in the four western provinces. Of a total cash farm income of \$1,654,165,000 Manitoba received \$152.6 million, Saskatchewan \$410.2 million, Alberta \$284.6 million, and British Columbia \$70.7 million. The four western provinces were down by \$180.9 million, but exceeded the cash income of 1943 by \$168.7 million.

Taking Canada as a whole, the order of importance of receipts was livestock, dairy products and grain, seeds and hay. No single province, however, duplicated this order of importance. In the prairie provinces, the combined revenue from grains, seeds and hay led in each case, followed by livestock, with dairy products in third position. In British Columbia the leading revenue producers were fruit, followed by livestock and dairy products, while as in Ontario livestock came first, dairy products second, with vegetables and other field and cash crops third. In Quebec, dairying was first, closely followed by livestock, with miscellaneous farm products, including forest products and fur farming third. In New Brunswick, vegetables and other field crops come first with livestock second and dairying third.



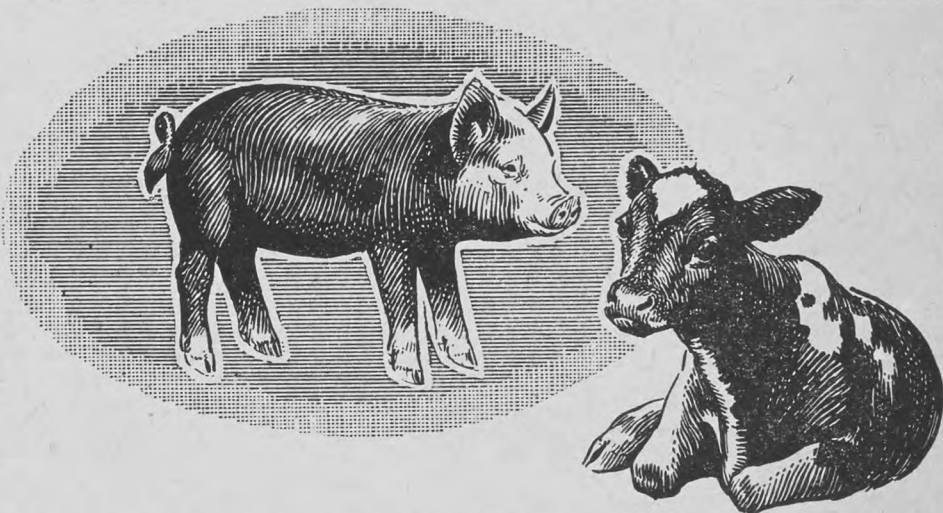
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1. Mechanical orange sorters in Algiers.

[Canadian Army Photos.]



2. Fresh dates being selected in Algiers for shipment to Canadian forces in Northwest Europe.



3. Canadian soldiers in Europe got Christmas oranges from this orange grove in the French colony of North Africa.



4. Orange packers, among them veiled Mohammedan women, in an Algiers warehouse.

HORTI- CULTURE



These pictures, kindly supplied us by Mrs. C. Kirkland, Wilkie, Sask., were taken on her farm after the heavy, wet snowstorm of September 21, 1945.



The September Freeze

IN The Country Guide for November, 1945, F. L. Skinner, Dropmore, Manitoba, commented on the serious damage to fruit and other plants resulting from the severe and unusual frost occurring during the month of September. A. J. Porter, Parkside, Saskatchewan, adds the following comment with respect to damage in evidence on his own strawberry and other fruit plantations.

"The thermometer dropped here to almost zero. No damage can be seen on any apples or crabs, but on plums there is considerable browning of the cambium in all but the pure native varieties and Mandarin. How much of this will result in outright killing will not be known till spring, but it is very doubtful if any fruit buds survive on most of this wood. The sandcherry hybrids, including Opata, also show a good deal of browning on the younger wood, mostly where it was late in maturing. On the whole, damage is not nearly as much as I expected. The reason for this is, I think, the fact that we had a heavy rain early in August. This started a heavy growth of pigweed and other annual weeds which I left as a cover crop with the result that my trees were much nearer to a state of maturity than they would have been otherwise at the time of the freeze. If I had cultivated again to kill these weeds, I think damage would have been very heavy.

"In the small fruits, raspberries showed considerable browning of the tissue at the base of the buds and these buds will no doubt be dead by spring. Here again the stage of maturity seemed to be the important factor. Well matured canes showed no damage at all, even on relatively tender sorts such as Viking.

"Strawberries also showed a good deal of injury, young runner plants being browned inside at the crown; also the roots were killed on many, just at the base of the crown. Large runner plants and the mother plants showed little or no damage, probably because there was sufficient foliage on these to protect them from the extreme temperature."

We have recently received a note from John Lloyd, Adanac, Saskatchewan (about 100 miles west and 25 miles north of Saskatoon), in which he describes the damage done during a very bad, wet snowstorm which fell on September 21 (see also pictures on this page taken at Wilkie after the same storm. Wilkie is about 15 miles east of Adanac, and about 25 miles north and 30 miles west of Biggar, where the storm seems to have petered out.) Mr. Lloyd says:

"In western Saskatchewan we experienced the worst wet snow storm of our experience—a foot of snow fell on September 21, and following days at 30 to 32 degrees, breaking many of our larger fruit trees right down—followed a few days later by zero weather, causing damage to young hybrid plums above snow line. Much of the later fruits were still on tree.

"This storm from the north seems to have only gone as far east as Biggar, Saskatchewan, and west into Alberta. It was the first time we have had this

kind of wet clinging snow when leaves were still on trees, breaking them badly. Our largest crab trees, such as Osman and Anaros, are lying on the ground, and 10 to 15 feet broken off tops of many of our 40 foot spruce. Luckily, it did not damage nursery stock and young trees, or cherry plums. They were just covered up, and we picked and preserved some M 119 (Manor) afterward.

"This 1945 season has had the latest spring since 1907. After being warm in April and many cherries budding out and being killed back by heavy frosts on V-E day. It seems we cannot get away from this kind of damage, like the drought and hail, and have to make the best of it. Upright-growing cherries are very desirable kinds, but we must figure on them being killed back sometimes in early spring and late fall frosts.

"The Brooks Horticultural Station experienced a bad hail storm and many districts were very dry. Still there was quite a lot of fruit in 1945, although much smaller and later than usual."

Raspberries at Miami

SOME time ago we received a very interesting letter from W. Oakes of Miami, Manitoba, containing a comment on more than 20 varieties of raspberries. Miami is located in southern Manitoba, about 12 miles north of Mor-den, and Mr. Oakes has chosen Viking, Newman, Madawaska and Ottawa as outstanding among all the varieties he has had under test for the past three years. He says he would also include Kent with this list if he was sure it was hardy enough, since it is of good quality and in 1945 produced "the heaviest crop of large fruit I ever saw."

Latham, one of the most popular varieties, last year produced its first good crop in three years. Certain varieties, such as Indian Summer, Taylor, Rideau, Golden Queen, Lloyd George and Newburgh have not as yet proved sufficiently hardy with Mr. Oakes. Others, such as Ruddy, Chief, Sunrise, Cuthbert, Sunbeam and Herbert apparently lack sufficient size to be fully satisfactory. Washington is regarded as a fine berry (one year's trial), and Glenelm, a cross between black and red, seems as hardy as Ruddy, but the fruit is firmer and larger. Ruddy, incidentally, is the only variety that tip-kills with Mr. Oakes.

He describes Madawaska as a very large, dark, attractive berry, which has done well with him and seems hardier than Latham. Ottawa, a very strong growing and hardy variety bears "very large, bright, long fruit." Both these varieties have given good crops for the last three years.

Newman, hardier than Chief at Miami, always has a good crop of large berries, and has proven one of the most reliable sorts, while Viking, another reliable variety with Mr. Oakes, and a good quality berry, provides a good annual crop, but is not as heavy yielding as Ottawa.

Onions For The Prairies

LOCAL merchants have more trouble handling onions than all other types of stored vegetables, according to some I have interviewed. The high rate of spoilage due to rot, even among imported stock, has been so heavy that only a few are kept on hand. No type of storing seems to be of benefit. Onions which look perfectly sound on arrival are sold to customers who complain the hearts are bad, while the outside is perfectly sound.

A study of onion raising over a period of years has proved that it is best to raise our own; and that onions will keep well, if sound when harvested. In order to be sound they must be of an early variety, in order to ripen off well before storing. For a long time I had noticed that the early Silverskin and Barletta pickling did very well from seed. One year I had more than could be used for pickles, so put them away until other varieties were used up. In February they were still in sound condition and lasted until May. Only the earliest varieties can be matured from seed here and stored without rotting.

I tried planting a few for seed purposes, but the summer was wet and cold, so that venture was a failure. If it had stayed normal weather, with the usual sunshine they might have set seed, but as one never can foretell what the season will be like, I never tried again.

Early Grano gave the best results from seed among the other varieties tried. For several years, I grew them from the size of golf balls to a tea cup. Now it seems the seed has disappeared from the catalogs. When it is again listed, I will surely raise them. Nothing can replace them for eating raw, except the high-priced Spanish onion.

The onion crop is a difficult one to harvest, especially if the fall is rainy. Some advocate tramping down the tops to hasten maturity, but it isn't satisfactory with me. The big-necked ones I pull and tie in bunches and store in a warm place, preferably an upstairs room, and use them up first. The ones that ripen to the extent of fully withered tops, are lifted during a warm, dry, sunny day and left for a few hours to dry in the garden before bringing in. If wet weather continues throughout the harvest season, all one can do is shake off the dirt from the roots and dry thoroughly inside before putting them in well ventilated containers in a warm place. If only enough are raised for one's own family, one can pretty well watch and use any that show signs of decay at once. A few cents worth of seed will pay large dividends.—C. J. Kerns, Acme, Alberta.

Tree Planting After Fallow

THERE is good reason for the rule laid down by the Forest Nursery Stations of the Dominion Department of Agriculture that trees cannot be supplied free for shelterbelts and other farm uses unless the ground has been prepared adequately the year previous to planting. There are four principal reasons why cultivation the previous year is helpful to the trees and to planting. First is the fact that only careful summerfallowing will eliminate weeds, plants, or underground roots, which, if allowed to remain in the soil, would hold back the growth of trees after planting. The second is that summerfallowing conserves soil moisture; the newly planted trees require ample amounts of moisture if a very large percentage of them are to live. On the other hand, when planted in soil containing a good reserve of moisture and a moderate amount of plant food, few trees should fail to become established, even though the actual growing season may be relatively dry and hot. The third reason is that, if there has been good, thorough cultivation the year previous to planting, cultivation for the first few growing seasons is made easier, because summerfallowing will not only destroy the weeds growing in the season of cultivation, but will hold back development of serious weeds during the period after planting. The fourth reason is that because prior cultivation enables a much higher percentage of the trees to live, there will be very little replanting or filling in needed as a result of trees dying out or becoming weakened by lack of moisture.

Breeding Hardy Fruits

By Dr. J. S. SHOEMAKER,
University of Alberta, Edmonton

4.—Objectives in Fruit Breeding

WHEN the members of the Western Canadian Society of Horticulture met at Edmonton, in November, 1945, careful plans were drawn up for co-ordinated, enlarged effort in fruit breeding projects across the prairie provinces, northern British Columbia, and northern Ontario. A coherent, well integrated plan is a basic objective in a fruit breeding program. It is both broad vision and sound thinking to chart such a course at an early stage of fruit development in this large part of Canada.

In a number of ways fruit growing in the prairie provinces has already passed the stage of infancy. There are, for example, so many varieties of crabapples that the better ones have tended to become overshadowed in the confusion. A dozen outstanding crabapples of proven merit would probably meet our requirements. In fact, in a single orchard, that number is really too many. Long lists of varieties also cause headaches to nurserymen.

What do we need in crabapples that cannot now be found in, say, Dolgo? This variety is one of the best now available, but it leaves much to be desired. Probably the outstanding good characteristics of Dolgo, at least as it grows at Edmonton, are the splendid red color of its fruit, the comparatively high resistance of its flowers to frost, and the excellent jelly which can be made from the fruit. But, there is an axiom to the effect that "all varieties are characterized by their faults." The tree of Dolgo is not as long lived as could be desired, a number of other varieties are more suitable for preserving, the fruit is somewhat on the small side, the yield could be higher, and it has other drawbacks. Therefore, though Dolgo possesses some good points, it lacks quite a number of desirable features.

One task confronting the fruit breeder is to combine all the good qualities of our present varieties which, as yet, are not to be found in any single variety. Theoretically, this does not present any serious problem. A more significant matter is to be able to recognize a top-ranking crabapple when it appears among a large number of seedlings in a breeding project. This latter phase requires careful testing under a wide range of conditions by men who are thoroughly familiar with crabapple varieties. An important objective, therefore, in a fruit breeding program is to make sure that a variety has real merit and satisfactory adaptation, before it is introduced through the nursery trade.

Now that certain fruits are grown on a distinctly commercial basis in parts of the prairie provinces, the viewpoint with respect to desirable features in varieties has undergone change from the earlier pioneer approach. One grower at Edmonton, for example, produces red raspberries on about 30 acres. Incidentally, this, a prairie-province small fruit planting, is one of the largest plantings of red raspberries in Canada. In all, about 75 acres of red raspberries are grown commercially in the Edmonton district. The early pickings must compete in the larger stores with fruit of the Washington variety, shipped in from British Columbia. The comparatively small-fruited Chief variety is at a disadvantage in this respect, yet the Chief is perhaps the hardiest of the better varieties for planting in a general way throughout the prairie provinces. Where raspberries need to be covered for winter protection, in order to obtain a crop of desired quality and size, some thought in breeding needs to be given to kinds which are well adapted for this purpose.

There is no difficulty in easily thinking of many ways in which our present varieties need to be improved. We know how to bring about the desired improvements and much has been done on the proverbial shoestring. Above all else lies the need for adequate support for a co-ordinated, coherent, and well integrated program.

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SCOUTING AROUND

Continued from page 8

as much security as any other occupation; and in a rural community a man can find more opportunities for useful public service than comes the way of the average city man.—R.D.C.

Ranching With Whitefaces

WHY do people farm? Of course, some people have to produce food, especially when so many millions of people throughout the world are really underfed; but what is it that induces one person to remain on the farm, or to leave some other occupation for the farm, when another individual may do exactly the reverse. I've often wondered what the results would be if one could secure a real honest opinion from, say, a thousand farmers. How many would really feel that they are farming because they like the farm; and how many are farming because they were raised on the farm and have never found a suitable opportunity to leave it.

What is really in my mind is—well, just that. How many people are really farming because they feel that working with growing plants and animals is the most satisfying occupation in the world; and that between the farmer and his land there is a feeling of partnership that is expressed in the quality of crops and livestock that is turned off from the farm each year?

Last summer, one day, I visited the ranch now being operated by J. A. Paul of Okotoks, Alberta, along with my travelling companion, Clarence Tilenius, who paints some of the cover pictures for The Country Guide. Both of us were under the guidance of R. H. (Dick) Painter, whose work in the control of warble flies has now become so well known throughout the prairie provinces. In 1944 I tried to visit Jack Paul at Macdowall, Sask., where he ran a Hereford ranch for a number of years, until severe losses (ultimately traced to black flies which caused the death of a considerable number of high priced animals) induced him to move to southern Alberta. I called at the ranch two days after Jack had moved away, when the only living thing remaining seemed to be a cat.

At Okotoks we found him re-established with a herd of 171 Herefords, and it was as we were moving around among these attractive whitefaces in the pasture along the river, that I wondered again why people farm.

Jack, I knew, was a born livestock man. He could no more keep away from livestock and be happy, than he could sprout wings and fly. He had years of experience grading livestock in the market, and can see under the hide as far as the next man, and farther than most. He is regarded as a good judge of livestock; and I didn't need to look at him or even ask him what he was thinking about as we walked among these white-faced matrons and their calves, whose eyes were so full of curiosity and suspicion. To him each cow and each calf had an individuality of its own. The sight of each individual animal brought a feeling of satisfaction or disappointment. He had that feeling of responsibility, as well as pride of ownership, which every good stockman possesses.

And yet—even the move to Okotoks hadn't entirely left behind the hard luck introduced by the black flies. Not long

before our visit, two or three head of valuable cattle had been lost from bloating on a pasture containing some alfalfa. It is all right to suggest turning cattle on alfalfa pasture only for an hour or two, but this is not very practicable under range conditions. The land was leased and had been seeded, under conditions beyond his control, to a mixture of four pounds of alfalfa, four pounds of brome grass, two pounds of timothy and two pounds of crested wheat grass. All summer he had been kept busy watching them after every shower, trying to keep the pasture eaten down so that it would not be too lush and thus induce bloat more easily. As a result of constant watching he was able to treat quite a number of head in plenty of time, even though it was necessary to puncture two or three in order to save them. But apparently death can occur quickly, because he told us of one instance where he had ridden out to see the cattle at one o'clock in the afternoon, then had gone in to dinner, and when he went out again at half past three, after a shower, one or more animals had died. Naturally, he wants to get rid of the alfalfa and substitute crested wheat grass mixed with brome, because he believes that the latter will provide summer pasture after crested wheat grass has become brown and less nutritious.

Ultimately, Mr. Paul hopes to have 300 head of Herefords, but from all that I have heard from southern Alberta, this winter, it has proven to be a very trying time for most of the men who have had cattle on cover crops in the fall, and for the ranchers as well. An unusually heavy snowfall has forced many thousands of cattle on to the market and has made it extremely difficult to feed the remainder. Normally, there is enough grass available throughout the winter months so that cattle can be brought through the winter on from three-quarters of a ton to a ton of hay, as supplementary feed.

In the winter of 1944-45, Mr. Paul brought this herd through on very little more than grass and water. This year, the circumstances are probably very different indeed. The ranch carries not only a breeding herd, but steers are normally purchased for feeding; and at the time of our visit there were 32 stacks of hay put up on a portion of the 580 acres. The grain necessary is largely purchased.

The herd sire on the Paul ranch was Real Prince Domino Reward, a two-year-old sired by Prince Domino's Reward, and out of a daughter of Real Prince Domino 91st; tracing on both sides of his pedigree to Real Prince Domino 25th, imported from Colorado, by Hunter Bros. in 1932.—H.S.F.

Osoyoos and Zuccas

NORMALLY, in the Okanagan Valley of British Columbia, midsummer temperatures vary from hot to hottest. In the middle of the Valley, say at Kelowna or Summerland, the hot sun beats down between the high hills on either side and really warms things up. As one goes southward to Oliver where crops are earlier, it is even hotter; while down at the International Boundary,



[Guide photos.]

1. Zuccas in blossom.
2. Watermelons growing into juicy sweetness.

3. Mike Santo, Osoyoos, B.C., irrigating a ground crop of tomatoes.



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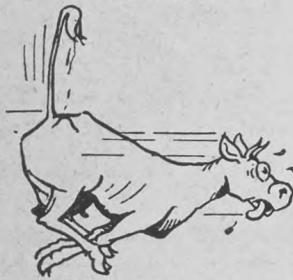
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ROTENONE (DERRIS ROOT) BASE

just across from the State of Washington, it is hottest.

We came into Osoyoos (O-soo-yus) just at six o'clock one day in the last week of July. We came in from the south, having driven from Grand Forks, 105 miles away, through the State of Washington, in order to get better roads. The late afternoon sun was beating down on the little valley town, whitening all the buildings with its glare; and later in the evening, when we were told that Osoyoos produces the earliest grown fruit in Canada, I recalled that six o'clock sun and understood.

This story is about Mike Santo, who grows Zucca melons. I have never really seen a Zucca melon except in pictures, because when we visited Santo's 25-acre farm, the Zucca plants were still growing; and the huge melons (gourds probably) which may weight as much as 100 pounds (more often 50) and stand waist high or better so that they may be packed in cars like cordwood, are processed and used for the manufacture of candied peel. They have been a very profitable crop during the war years.

Mike Santo, we discovered, was one of the most extensive growers of Zuccas at Osoyoos. A Hungarian, who formerly worked in mines and in various places, he came to Osoyoos nearly 12 years ago, and settled on a government irrigation scheme on the west side of the Lake. Not afraid of work, and with a keen eye for getting ahead, he went after Zuccas. Mr. Santos told us that they will yield from 26 to 28 tons per acre, and at \$30 per ton, green weight, the gross return per acre will amount to around \$750. When processed and put through the Osoyoos Growers' Co-operative Association, they bring about \$45 per ton.

Nearly three years ago Mr. Santo bought a 25 1/4 acre piece of land on the east side of the Lake, on which he had, last year, 20 acres piped for irrigation, at a cost of about \$110 per acre for the piping and making the land ready for irrigation. Water is secured in co-operation with four other growers by means of a pumping system, which brings it from some distance away. The water is shared on the basis of acreage, and Mr. Santo's share was 27 hours of water out of 72. Thus he is able to irrigate every three days, the water being distributed by means of large, seven-inch, feeder pipes which are reduced successively to six, five and four inches, finally running into the small ditches between rows from a one-inch nozzle.

Ultimately, however, most of his farm will be devoted to fruit. A considerable acreage of young fruit trees was planted in the spring of 1945, and the land will be fully "ground cropped"—this is, completely planted to other crops between the rows of trees, for the first few years. Beginning in 1947, the ground crop will be reduced by one row each year until the land is fully occupied by the fruit trees.

In addition to fruit trees, the crops grown are Zucca melons, watermelons, Earliana tomatoes, cucumbers and

muskmelons, principally. All of these crops are profitable, with the exception of watermelons and cucumbers. Last July cucumbers were lying unpicked, owing to some overproduction. The crop from the north part of the valley had begun to come in a week before, and orders had come from Kelowna to cease shipping from Osoyoos, where shipping had been under way for some time. Watermelons, too, were not as profitable as they should be, selling at \$45 per ton. Mr. Santo thought they should sell for \$60 to \$70 to make them profitable. Unfortunately, it was cheaper to bring in melons from the States than to grow them in Canada.

Both the Zuccas and muskmelons were late, in 1945, on the Santo place, owing to pressure of work involved in getting a new place operating. This was no light task, even on a 25-acre place devoted to fruit and ground crops. Equipping the land with irrigation and levelling it for the purpose, erection of a modest set of buildings, including a small greenhouse for starting the necessary plants, and tillage and other machinery necessary for efficient operation, would probably involve a total investment of \$20,000. Mr. Santos had only two horses on the place, and felt the need of a caterpillar tractor very badly.

All the crops grown on this farm are voracious feeders. The heavy vine crops not only require a great deal of water, but use very large quantities of plant food, and since the soil of the Okanagan Valley here is very sandy, heavy fertilizing is essential. Manure is hauled in by truck, and Mr. Santo informed us that the spring of 1945 it had cost him \$750 to fertilize a five-acre plot of watermelons, cucumbers and muskmelons.

A great deal of labor is required for the production of such crops as these, and irrigation must be watched very carefully. Tomatoes, for example, are set four feet apart and cultivated both ways until they reach a period when only lengthwise cultivation should be given. For irrigation a ditch shovel is attached to the cultivator, so that a small irrigation ditch can be run between each two rows of plants. An irrigation pipe feeds several rows merely by blocking off all the ditches leading from the one pipe, except one, and then by blocking off that one and the others in turn until all have been irrigated. Underneath each tap or nozzle is a small bed of gravel to prevent the water wearing holes into the ground.

By the time we were finished talking, we had begun to look with some longing at the watermelon patch. We asked Mr. Santo how it was possible to select a fully ripened melon and he intimated that he was almost always able to pick out the best ones, having learned from an expert brought up from the United States some years ago. We, therefore, asked him to pick out for us the best one he could find; and later in the evening, after we had moved up to Oliver and obtained our hotel room, we proved to our complete satisfaction that he knew his watermelons.—H.S.F.

WEED CONTROL UNITS PAY OFF

Continued from page 6

lots and assumed approximately a third of the cost, the major cost of the spray program has been carried by the municipalities. Over the past five years a total of 1,089,000 pounds of Atlacide has been used on over 1,500 farms. The cost has been \$131,000 to the municipalities, plus the government share of \$25,000, or a total outlay of \$156,000. This works out to an approximate average of \$100 per farm treated.

Below are listed some of the reasons why success has followed this plan of treating this group of weeds: 1, Treatment has been done by experienced persons with proper equipment; 2, there has been the necessary "follow-up," whereby patches were completely eradicated; 3, as a result of the campaign, the presence of any one of these weeds was reported, often before the infestation had got out of bounds; 4, farmers, who otherwise might not have been able to afford to purchase chemical, have been serviced; 5, co-operative effort, of all having any such weeds, has prevented the spread on individual farms, and in areas which otherwise would have been let go to become an ever increasing problem and source of infestation.

SO much for the small patches that can be treated with chemical. What of the several thousands of acres of extensive infestations? These at once fall into two divisions—infestations on good land, and those on less productive sandy soils. Each presents a different problem, which must be met in a different way.

Over the last four years it has been amply demonstrated that leafy spurge (and the same would apply to the other three weeds) can be eradicated by intensive cultivation, at a cost that is not excessive, and on an acre basis, much more cheaply than by chemical.

Intensive cultivation to be successful requires strict adherence to three underlying principles; and should any one of these be overlooked, failure to eradicate the weed is bound to follow. These are: Cultivation at frequent intervals, a thorough job at each operation, and carrying the cultivations over a sufficiently long period to completely starve the plant.

Under average farm conditions leafy spurge shoots will re-emerge from six to eight days after cultivation. The plants may be safely left to grow above ground for five or six days, during which time they are drawing on re-

serves of food stored in the roots. If left longer the process is reversed and food goes back into the roots. This is the time to re-cultivate. Under farm conditions, cultivation should be spaced 14 days apart. It is recommended that a certain week-day be set apart, every two weeks, on which cultivations be done. Where the schedule is interrupted by rain, the cultivation is picked up as soon as possible, and then again on the next schedule date. Too much emphasis cannot be placed on regularity of operations, spaced at 14-day intervals.

A thorough job each time over, simply means cutting off below ground all shoots at each operation. In addition to the use of an implement suited to soil conditions and plant growth, it must be in good working condition, with the cutting edge kept sharp. A tractor-drawn machine, where power is ample to maintain a fair speed, assures a good cutting job. Finally, the choice of implement will be determined by a number of factors. Without going into details of the several that may be used, the cultivator equipped with wide shoes and plenty of overlap will be found most useful.

Thorough cultivation at regular intervals must be carried over a sufficiently long period to completely starve the root systems of all plants. One season is not sufficiently long, and two, at least, are required. On the heavier soils, the land can usually be cultivated intensively for two years, without running into the hazard of soil drifting. On the lighter loam soils, experience has shown the advisability of alternating one season's intensive cultivation with cropping, and, as soon as the crop is harvested, starting cultivation, which is followed through until freeze-up and over the next season.

UNFORTUNATELY, it is much easier to outline a program than it is to have it followed through. With few exceptions, leafy spurge infestations that have become too extensive to control by spraying, are met with on problem farms, operated mostly by problem farmers. That is to say, the land may be rented, or tied up in an estate. Again, the operator may be, and often is, short of power; he may not have suitable implements with which to do the job; or he may be financially involved, or lack help, or show no interest in the problem, and so on. Often when none of these handicaps are met with and a good start has been made, a busy season such as harvest time rolls around and the field under intensive cultivation is passed up for a month, with the

result that leafy spurge becomes re-established and all the work done is lost. Over the last five years the writer has met with less than half a dozen farmers who have been able to apply successfully this method of eradicating leafy spurge.

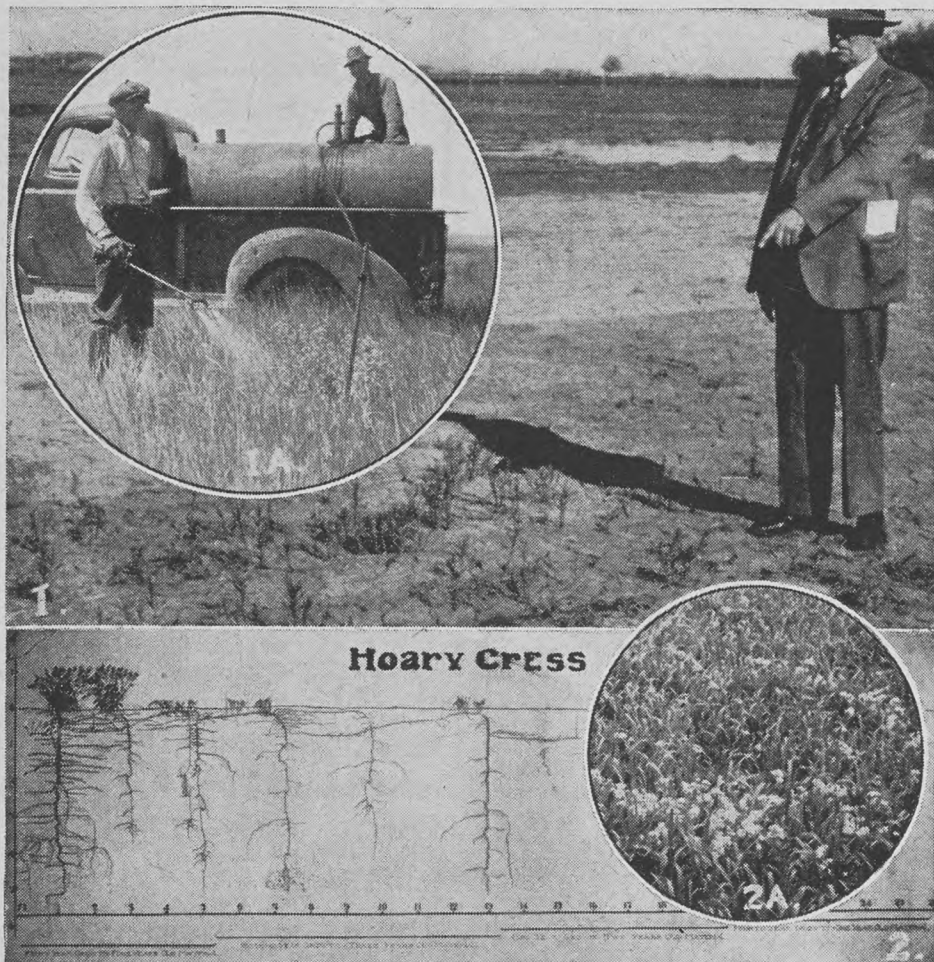
In 1941 it became apparent that some plan was needed whereby acreages infested with leafy spurge, or the other weeds in the group of deep-rooted perennials, could be taken over and worked by the municipalities. Municipal officials felt that it was short-sighted to eradicate small and scattered patches with chemical and let the more extensive infestations go untouched. Even worse, these were usually being worked, giving every chance of further spreading the menace.

During the 1941-42 Session of the Manitoba Legislature, an amendment, known as 10A, was made to The Noxious Weeds Act. This empowered municipalities to declare a specific piece of land to be a "weed infested area." Such lands could be taken over by the municipality for a period of five years, the weed eradicated, the land cropped and the municipality reimbursed for the outlay involved. The land would then be returned to the owner, with any surplus above the cost of operations. This legislation has proved to be everything that its sponsors hoped for.

Since the spring of 1942, nine municipalities have taken over more than 1,100 acres of leafy spurge-infested property. Two municipalities, Turtle Mountain and Victoria, purchased tractors and implements, and engaged men to operate their outfits. In the other municipalities the work was done under contract, usually with the Weeds Inspector directing the program. In addition, several other properties have been worked under a somewhat similar arrangement, with the mortgage company co-operating. The results have been most gratifying and, as a postwar measure, it is expected this method of eradication will be considerably extended, with the government becoming a partner with the municipality.

ONE of the first properties to come under this plan of operation was a 90-acre field of heavy clay loam just out of Portage la Prairie. After being intensively worked in 1942, the land was seeded to barley the next spring. A good crop was harvested, and after all expenses incurred over the two seasons had been met, \$900 was returned to the owner, with the land freed of most of the spurge.

On 47 acres of light loam soil near



1. Small and scattered patches of deep-rooted, perennial weeds are most economically eradicated by co-operative, or municipally owned spray outfits (1A inset).
2. The roots of bad perennials may penetrate to unbelievable depths. Hoary cress, too, is very troublesome (2A inset).—Man. Dept. Agr. photos.

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Carberry, taken over by the municipality of North Cypress in the fall of 1942, equally encouraging results have been obtained. Plowed late in 1942, cultivated ten times in 1943, and cultivated before seeding to Sanalta barley in 1944, this undertaking showed a profit, after all expenses had been met, of \$604. So little spurge remained that another crop of barley was taken off in 1945. While a heavy crop of barley was not harvested, \$200 was added to the credit side of the ledger after expenses were met. Cultivation started in October and will carry through 1946, when it is expected the last remaining plants of leafy spurge will be eradicated.

A large and most difficult undertaking has been a 179-acre block of good land a few miles west of Killarney. Almost every square foot was a mass of either leafy spurge or quack grass; in addition, the surface, when abandoned by the former owner, was left very rough, with not a few boulders. The wet seasons of 1943 and 1944 added to the problem of regular and thorough cultivation. A 57-acre block which had carried the heaviest spurge infestation, was worked for the third consecutive season in 1945. The balance of the field (152 acres) was seeded to Royal flax—not the most suitable crop, as flax is a poor competitor of weeds that may appear. As it turned out, considerable seed of stinkweed, lamb's quarters, and mustards had lain in the soil for some years, ready to germinate under favorable conditions. However, in spite of this, 2,192 bushels (nearly 18 bushels per acre) of flax were threshed, netting \$518.63, sufficient to look after all outlay, including fencing the farm, and leaving \$135.23 to apply to taxes. Except for 20 acres which will be fallowed for the fourth consecutive season to finally eradicate scattered, weak patches of spurge, the whole field will be planted to barley in 1946.

The municipality of Victoria, a couple of years ago took over a half-section of rather light soil north of Holland that had all the neighbors up in arms. Here again leafy spurge was the problem. The farm was tied up in an estate and had reached the point where no one wanted to rent it. With a line of new machinery including a tractor, two years of good workmanship have completely changed the picture. Leafy spurge is well on the way out. Some of the lightest soil that was originally a solid mass of spurge, has been cleaned up and put down to grass. Not least, operation expenses to date have been met in full from proceeds.

The municipality of Rhineland, in the spring of 1945, brought three properties (100 acres, 40 acres, and a 15-acre field) under this plan of control, and has demonstrated the soundness of the policy to all who have had an opportunity to inspect these jobs.

INFESTATIONS of leafy spurge and similar bad weeds on the less productive sandy soils, present the most difficult problem. Seldom do such lands warrant the outlay necessary. Were costs to be disregarded, soil drifting might easily become an even worse menace than the weed.

On a number of such properties where leafy spurge has been the problem weed, sheep have given a most excellent account of themselves. A half-section farm of very light soil, near Carman, that carried in 1941 a very heavy infestation of leafy spurge, has since been pastured continuously with a flock of some 150 sheep. Inspections made from time to time have shown a steady improvement until in 1945 very little of the weed remained.

On a farm near Hartney closely pastured by sheep for two years, followed by treating a few small remaining patches with chemical, the secretary-treasurer, writing under date October 16, 1945, stated: "... the spurge is eradicated except for any new growth, which the present owner is watching carefully." The writer visited a 4½-acre field near Winkler last fall that had been pastured for three years with 18 sheep. The spurge had actually been "eaten out of the ground." Questioned, the owner, G. J. Remple, stated he had not seen a single plant of spurge since spring. He assured me that the sheep preferred the leafy spurge to any other growth, including crested wheat grass, to which they had access as the field became bare.

Fifteen acres of very sandy soil south-east of Bradwardine that were covered with leafy spurge, were fenced in May, 1943, and pastured with 16 sheep; 30 head in 1944; 31 head in 1945. To quote Weeds Inspector Wm. Miles, in a report dated October 19, 1945: "... they have done a splendid job. The spurge is 90 per cent killed... except for a few delicate plants around the fence, I found only a few widely spaced tiny plants."

UNFORTUNATELY, conditions are such that sheep cannot be placed on many of the problem properties. Some attention has been given to getting leafy spurge-infested land back into grass. Crested wheat grass, which has a strong root system, has been favored for such purposes. The results so far have been none too encouraging, as it seems difficult to get a catch of grass where the seed is drilled directly into the infested land.

The first seeding of this nature was done by officials of the Reclamation Station, Melita, on a very heavy infestation on light loam soil in the early spring of 1942. The grass seed was drilled into the soil without any surface treatment. After three years a check showed:

Leafy Spurge	Unseeded	Seeded	Check
Number Stems,			
per sq. ft.	32	62	
Height (inches)	14	27	
Seed-bearing stems	4	16	

Seedings made each season since have been a failure. A number of municipalities have seeded acreages and have been disappointed, through failure to obtain a catch.

Near Basswood, in 1943, a cultivated field of heavy loam soil carrying a considerable spurge infestation was seeded into the stubble in late fall. An excellent catch of grass was obtained, and an inspection made in July, 1945, showed at least a 90 per cent reduction in spurge plants.

In the late fall of 1944, near Rounthwaite, the P.F.R.A., Dominion Experimental Farm, Brandon, and Oakland municipality officials co-operating, took over 120 acres of land, abandoned on account of leafy spurge. This land was seeded to crested wheat grass, sweet clover and mixtures of the two.

On some plots the seed was drilled into the soil without any treatment; on others the surface was scarified before seeding. Better catches were obtained following the latter treatment. This coming summer the project will have reached the stage where it may be possible to make definite recommendations as to how effective this approach is in controlling leafy spurge.

Where extensive infestations cannot be cultivated, or pastured, mowing to prevent seed formation and dispersal is to be commended. While this will never eradicate any of the group of deep-rooted perennials, it will at least go far to hold them in check. An excellent catch of crested wheat was secured on a badly infested field of good loam soil in the Basswood district. An inspection made in midsummer, 1945, revealed only the occasional remaining plants of leafy spurge.

MORE recent (not to be confused with spraying for deep-rooted perennial weeds), has been the introduction of a new "selective" chemical that can be used in growing crops to kill certain weeds without damage to the grain. The product goes under the trade name of Sinox. When mixed at the ratio of one gallon to 80 gallons of water and sprayed 80 gallons of solution to the acre on such annual weeds as common mustard, wild buckwheat and stinkweed, in the young stage, the weeds are quickly killed without damage to the crops. Demonstrated in Manitoba in 1944, and through the three prairie provinces last year, with a number of farmers purchasing and operating their own rigs in 1945, this chemical bids fair to meet the ever-increasing problem presented by mustard and such weeds.

Latest of all weed killers is 2, 4-D. This chemical works upon weeds through over-stimulating growth and development to the point that they wear themselves out. It will be on the market this season, more especially for use on lawns to kill dandelion and plantain, where it seems particularly effective.



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Mr. J. E. Brownlee, K.C., Vice-President of United Grain Growers Limited made a notable address on January 9, to the Annual Meeting of the United Farmers of Alberta at Calgary. Instead of the usual commentary on grain matters presented monthly on this page by United Grain Growers Limited, a summary is published of Mr. Brownlee's address.

When the bells rang out for New Year's Day they marked the passing of an era. It was a short one, but one of great import to the human race. It will occupy an important place in history. It witnessed the most terrible war this world has ever known and the most appalling loss of life. It witnessed more widespread devastation and in places, more abject distress and poverty than at any time in history, even than when the hordes of the vandals marched against the civilization that was ancient Rome. But it witnessed too, the shining valour, the stark courage, the grim determination, the supreme effort of free peoples to preserve those conceptions of life and thought which they hold so dear; it showed to an amazing degree the productive genius of a free people when production and more production was necessary to preserve their freedom. And at the end it witnessed the devastation of Hiroshima that left with the world the haunting terror of the atomic bomb, even while it heralded to the world the promise of benefits beyond measure to the human race if harnessed to the service of a world at peace. It was a great period in world history, but an unhappy one. I fancy most men and women will want to forget it.

A New Year—A New Era

The New Year's bells rang in a new era. What it has in store for the world and humanity we do not know. Will the impelling force of public opinion, shocked by the very tragedy of the war, force a noble and enduring peace? Can we shackle the productive genius of our people to the works of peace as we did to the needs of war? Can we organize our manpower for full employment in peacetime as we did for the grim necessities of war? Can we preserve the hopes and desires for better housing, cleaner communities, and closer neighborliness, for the building of a better society? These are some of the questions people were asking—and in the West we were asking two other more practical questions. What has the future years in store for Canada, and the farmers of western Canada?

It is an anxious time. The next ten years will be as critical as any similar period in world history. It is an anxious time for western Canada with our peculiar economy which depends so much upon food production and the ability to find markets for that which we produce.

Fortunately we can face the coming years with a fairly stout heart because the position of western agriculture is consolidated and ready in a way not equalled at any previous time.

I realize that this is not time for the backward look. It is rather a time to stand upon the heights and examine the way before us. This organization, however, is meeting in the second week of the new world era and is vitally concerned with the problems affecting agriculture and its ability to meet those problems. It has been a dominant in-

fluence in the life of this province for some 38 years. It has witnessed this province successfully pass through two periods as difficult and dangerous as any we are likely to encounter.

The first was the settlement phase. Few may clearly remember the great influx of settlers into western Canada in the first 12 or 13 years of this century. It is probably true that no greater mass movement of peoples has been crowded into the same short period in the history of modern times.

The peoples constituting that great mass movement represented various nationalities, spoke different languages and held various conceptions and ideals of political and social philosophy. Many

Summary of address given to the Annual Meeting of the United Farmers of Alberta, January 9th, by Mr. J. E. Brownlee, K.C., Vice-President, United Grain Growers Ltd.

of them came without any great reserves of money, either to establish homes, or to tide over periods of difficulty. The movement was largely unrestricted and unregulated and it is a miracle that serious problems of a religious or racial nature were not left for future years. The problem of land settlement is over however and has left no scars.

Then followed the period of adjustment and consolidation inevitable in any new country. Attracted by easy money and easy terms of credit, in their desire to establish homes quickly, they borrowed heavily and incurred credit without considering too greatly the terms of the contract. Interest rates were prohibitive for any pioneer settlement. The result was that while farms were cleared and put into cultivation, homes and farm buildings erected in a shorter space of time than in any other agricultural country, the efforts were not without disasters and those disasters came to a head with the great depression of 1930. For nearly a decade the debt problem was one of the outstanding problems in western Canada. With the beginning of 1940 it can be said that the greater part of the problem of adjustment was behind us, and widespread bankruptcy and eviction was avoided.

Stability, Recovery, Consolidation of Grain Trade

Happily, during the past four years agriculture has experienced on the whole fair crops and good prices, with a level of income at times exceeding even that of 1929. If we are realistic, therefore, we must admit that, from a purely materialistic point of view, the average farmer on the western plains is more securely dug in and entrenched today than at any time heretofore. The dangers of land settlement are past; the difficulties of readjustment are behind us and the past five years have witnessed very considerable recovery and consolidation.

In this work we have remained true to a great tradition in the long and orderly development of democratic institutions, following closely the political and social ideals of the mother country, which for nearly 600 years has been the leading exponent of democratic forms of government. If we have a weakness in this respect it probably lies in the fact that many of our people have not yet experienced the long training in democratic forms of government, which has proven such a sheet anchor to the people of Great Britain in their day of readjustment.

Mention has been made of an article on the Dominion in Time magazine of the issue of January 7. I think the following extract from that article is worth quoting: I quote,—

"Canada has fought abroad and produced at home as it had never fought and worked before—and her war record, at home and abroad, had gained her new stature in the world. Canada could no longer be classified simply as a promising young country; she had come of age.

"The Dominion was now one of the three great trading nations in the world (the others: The U.S. and Britain).

"With a population less than that of New York State, Canada was, at the

war's end, the fourth most potent fighting power among all the United Nations, and had the third largest and strongest navy.

"She went into the war a debtor nation and came out a creditor.

"By sole virtue of the fact that she, along with the U.S. and Britain, holds the secret of the atom bomb, she had been accorded a high place in the top councils of the world.

"Canadians were aware of their new power and prestige; so was the world."

Difficult Financial Problem

We must frankly admit that Canada also emerges from the war confronted with problems difficult in the extreme. Not the least of these is the financial one. Let us take a brief look at this problem. Farm organizations should understand it. They cannot afford to ignore it. The first fact which stares us squarely in the face is that on March 31, 1939, the last year before the war, the funded debt of Canada or Canada's national debt amounted to approximately 3 1/3 billion dollars. By March 31, 1945, that debt had increased to 13 3/4 billion dollars and by this time it is, no doubt, well over the 15 billion dollar mark. Now if we reflect that in the first 60 odd years of this country's history, which included one war, we had only built up our national debt to approximately 3 1/3 billion, but in five short years we have multiplied that debt four times, you can see something of the enormity of the cost of the war to Canada. At the same time you can see how tremendous that debt is for a population of 12 million people. Fortunately because of lowered interest rates the interest burden for carrying the debt has not risen proportionately and yet it is altogether likely that Canada's interest burden is now nearly as much as the total expenditures of the Dominion in the year 1939. In that year the Dominion spent slightly over one-half billion dollars. For the present fiscal year the Minister of Finance estimated an expenditure of 4 1/2 billion dollars, or well over eight times the expenditure of 1939. Admittedly much of that expenditure is still necessary for war purposes, but it becomes an interesting matter of speculation as to what the peacetime expenditure of the Dominion may be. At least one economist in Canada estimates that we cannot reduce that expenditure much below the two billion mark. Certainly it must be away beyond anything dreamed of in 1939, if for no other reason than the added costs necessary to carry the social services

which the Dominion has attempted, not the least of which is the recent Child Bonus Legislation.

Expenditure Related to National Income

Now let us see how any such level of expenditure relates itself to national income. In 1939 the national income received was slightly over four billion dollars. At that figure it was only slightly less than the level reached in the three boom years, 1928, 1929 and 1930. In 1939 therefore the government took one dollar out of every seven or eight for government expenditure, and the remaining six or seven dollars were distributed in other ways. The most optimistic estimate of postwar national income is around the seven billion mark. If, therefore, government expenditures cannot be reduced below the two billion level it will be seen that the government will take more than one dollar out of every four for government expenditure, leaving only three dollars to be distributed in other ways. We hope that estimate of two billion dollars is too high, but it seems to me that any conception of Canada's problems for the peace years, having regard to obligations incurred inevitably means a very high rate of government expenditure in relation to national income. That means that for the postwar years the level of taxation, direct and indirect in Canada will be higher than anything ever previously experienced in peace years.

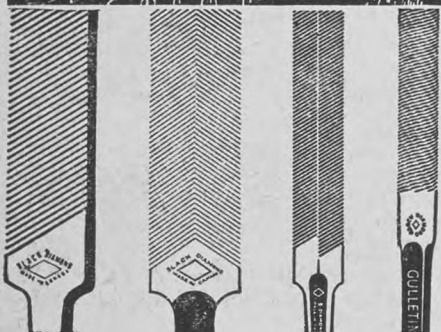
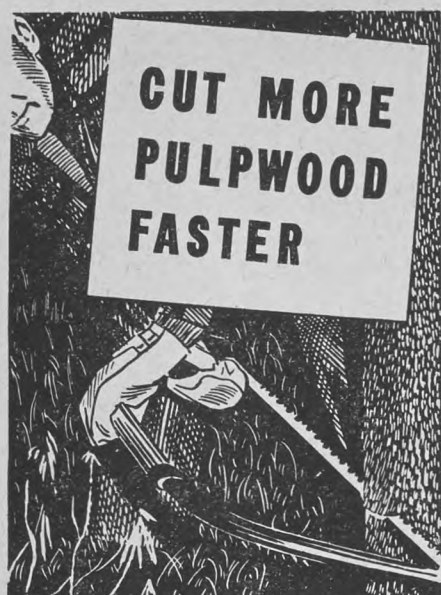
How is Western Farmer Affected?

Now how does that affect the western farmer? Well, if the Dominion must take in taxation from 20 to 30 per cent of the national income a very considerable amount of unrest may follow. Much of Canada's wealth is in the East. An attitude of mind may well develop there, which may make it extremely difficult for a government to carry into effect those policies of floor prices, the payment of subsidies, and the continuation of mutual aid in the distribution of foodstuffs which may be required for the stabilization of western agriculture. We have already witnessed in the case of oil the desire of the government to reduce expenditures. The situation is serious enough that farm leaders must be ever on the alert. A time of high tax levels is not propitious for government aid. Farm organizations may find this their first real test.

Problem of Export Markets

Let us turn to another aspect of Canada's postwar picture. In my judgment the problem which most directly and immediately confronts the western farmer is that of export markets.

I have been interested in reading a booklet recently published by an eastern economist on exports and national income in Canada. From an examination of statistics since 1923 the author concludes that over a period of years \$100 of exports is necessary for the realization of \$380 of national income, the benefits of export trade appearing in national income one year later as returns become widely diffused among the people. So he shows that in 1923 with exports of approximately 1,000 million the national income was approximately 3,800 million. In 1928 with exports at 1,376 million, the national income the following year, 1929, was the highest prior to the Great War at 4,728 million. In 1932 exports fell to their lowest level since 1923, at a little over 500 million and the next year in 1933 national income sank to its lowest level at roughly 3,100 million. By 1936 exports had risen to over the billion mark and national income to over the four billion mark.



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In 1943 exports had increased to over three billion and national income in 1944 was probably in the neighborhood of nine billion. There would seem, therefore, to be a definite relationship between Canada's export trade and the level of its national income and if we reflect that in 1932 the drop in export trade was to a large extent caused by a drop in the exports of agricultural products, we can understand why the prices of farm products suffered so disastrously at that time. It may be that by this time the lesson has been driven home to all Canadians with sufficient force that the money received by farmers for primary products is the foundation upon which national income and national prosperity is based. Practically all industry in Canada, excepting that which is directly related to mining and lumbering, must find its basic market in Canadian consumption, the amount of which primarily depends upon what agriculture receives for its products.

Germany—"Keystone of European Arch"

My mind goes back to 1927, when with one of the prominent farm leaders of western Canada, the late A. J. McPhail, I visited England, France, Belgium, Holland and Germany. What are these countries doing now? I understand France is buying some grain now, a radio report two days ago said some 25 million bushels. I believe France will again become a good customer. What about Germany? Lord Keynes once referred to Germany economically as the "keystone of the European Arch." It is so today. Without a prosperous Germany the countries lying alongside Germany cannot prosper as it has in past been their greatest customer. Today Germany is torn, devastated and divided and by reason of the fear that any great industrial expansion in that country may lead to another war, there seems to be a tendency to reduce it to a land of

the peasant class only. If that policy is carried out what impact will it have upon western agriculture?

If, however, it appears that cash markets are not available; that importing countries cannot finance purchases of food products, what then? Then we must turn to internal policies. Then will arise the question how far the Dominion will continue the policy of Mutual Aid. Then the Dominion must be asked to carry out its policies of floor prices. Then may arise some question of public opinion in other parts of Canada. Then would come the challenge to farm bodies. I thoroughly agree with what your president said in his presidential address—that for the next ten years at least the stabilization of farm economy must be the cornerstone upon which all agricultural policies must be built.

Practical Problems To Be Dealt With

We want to see western Canada a land of comfortable homes. We want to see farm homes so equipped that our boys and girls will more and more recognize the real opportunities and pleasures of rural life. They will not stay on the farms until we do. Through the farm organizations we should be alert to see that Dominion and provincial policies, with respect to housing, give full opportunity for the improvement of rural homes and above all we must pursue in every province the most active campaign to achieve rural electrification in as wide a degree as possible. I, personally, believe it is inevitable that in the not very distant future the Dominion will have to sponsor some public works program to assist private industry in taking care of the demands for full employment.

NOTE—The complete address of Mr. Brownlee has been published in pamphlet form and copies may be obtained at any office or elevator of United Grain Growers Limited.



Pioneer Days Recalled

An interesting article appears in a recent issue of The Winnipeg Weekly Market News of December 27, concerning the active life and service of D. S. Morrison of this community. Mr. Morrison was for many years a well-known grain buyer of this district and the article referred to gives an interesting account of those early days and the part which this well-known pioneer showed in the development of the grain business of the west. Mr. Morrison's father, William Morrison was in the early days of the upgrowing west a shareholder of United Grain Growers Limited.—Earl Grey, Saskatchewan.

Create Recreation Centre

The co-operative and energetic spirit of the west at its best is shown in the united effort of the Avon Heights district to create a rural recreation centre.

The district is southwest of Shaunavon. Like many another rural community it had no suitable spot for picnicking nor a place to swim.

A committee was named comprised of its president, Mrs. H. W. Shirley with Mrs. Jos. Stampnick and Mrs. Walter Howe. Help of the men was enlisted and a working committee formed of H. W. Shirley, Walter Howe and Jos. Stampnick.

A site was secured on Rock Creek, a natural beauty spot. The site of fifteen acres will be treed and fenced and an improved road built into it.

R. J. Cameron, Shaunavon, P.F.R.A. engineer, surveyed the site for a dam on the creek with the aim of forming a nice body of water, safe for swimming. Springs behind the dam will keep the water fresh.

NEIGHBORLY NEWS

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Farmers of the district, slim harvests finished, went to work with a will to build the dam which is 300 feet long and 11 feet high at its highest peak. Up to eight tractors were loaned, fresnos and carrier bugs attached were used voluntarily and willingly for the community enterprise.

The Welfare Workers acquired a cook car and bunk car which were hauled to the site and women of the district prepared huge meals for the workers. Housewives donated spare dishes and cooking utensils and quantities of food-stuffs. A second-hand range was donated.

Provision has been made for a kiddies' pool and swings, a ball diamond and a horse shoe pitch.

Plans are not confined only to summer activity. Hills surrounding the centre are ideal for tobogganing and it is hoped enough water will collect to form ice for skating. The cook car can be put to good use preparing bean feeds and the like. A real community spirit is behind this community project.—Avon Heights, Saskatchewan.

Delegate to World Youth Congress

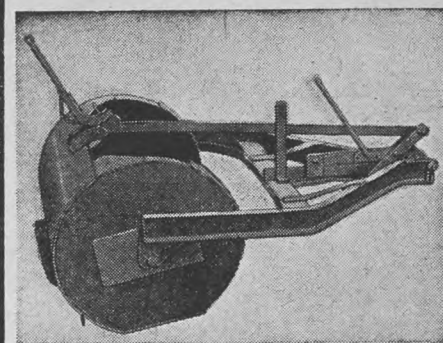
Capt. K. G. Thring, Calgary Tanks, who recently returned to Canada, was a delegate to the World Youth Congress held in London, England. Capt. Thring, former president of the Junior Branch of the United Farmers of Alberta, was sent to the Congress by the Canadian Federation of Agriculture. Over 600 delegates were in attendance from 64 nations. There were ten delegates from Canada and eleven service delegates. Capt. Thring feels that this is one of the most important actions taken by the youth of the world in their stand for freedom.—Calgary, Alberta.

Travel de Luxe

Mankota is having a real old time winter, with most side roads drifted up so high, that cars and trucks finally have to stay home. But our modern farmers still won't take out old dobbin and the

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one horse open sleigh. In place out comes the rubber tired tractor, with cutter or sleigh, to take home their ration of coal and groceries!—*Mankota, Sask.*

Lacombe Horse Sale

Lacombe's 1946 horse sale will be held on March 12, 13, 14, 15 as announced by Jesse Fraser, secretary and manager of the annual event. Initial preparations are now under way. To date, a total of 475 animals are entered, and it is confidently expected that more than 1,000 horses will go through the sales ring. A percentage of horses have already been listed from outside points. Emphasis is being placed on the possibility of horses being sold here directly for the European market. Animals for this market must be in top condition as likely top prices will be paid.—*Lacombe, Alberta.*

Farewell at Dunrea

Dunrea school was the scene of a farewell party in honor of Mr. and Mrs. Angus MacAulay and family who have since taken up residence in Winnipeg. Mr. MacAulay has accepted the position of clerk of the Municipality of Kildonan. During the evening the honored guests were presented with a purse as a token of appreciation for their long and faithful service in the community. For the past 25 years Mr. MacAulay has ably filled the position of clerk of the Rural Municipality of Riverside and for over 15 years has acted in the capacity of secretary treasurer of the local school board.—*Dunrea, Man.*

Form Athletic Association

At a meeting held here recently it was decided to form an association to be known as the Adanac Athletic Association. The aim of this organization is to sponsor all athletic activities in the community and to raise money for the building of a curling rink. The president of the association is H. Wheatland and H. C. Unsworth is secretary.—*Adanac, Saskatchewan.*

Quality Seed Grain in Demand

This part of the north has been noted for the production of high class seed grain and in order to cope with the increasing demand H. G. Neufeldt has built additions to his extensive buildings at both Codette and Nipawin. Mr. Neufeldt has given a lot of his time to the production of seed and also gave the district the start in pea growing which is now one of the main cash crops.—*Codette, Sask.*

Lumber Industry Busy

The lumber industry is again in full swing, only slightly hampered with the early snow which kept muskegs from freezing and delaying transportation into the woods. This district has played an important part in the aid rendered in supplying essential building material for the building of houses during the present shortage, and during the war a large part of the output was used for war building. Unfortunately the present heavy demand will soon deplete the forests and it will be years before there will be young trees large enough to cut. Fire also took a heavy toll a few years ago which has not been replaceable.—*Carrot River, Sask.*

Welcome Home to Veterans

The Endcliffe community are pleased to welcome home the boys that have so far returned from active service. End-

cliffe boys at home at the present time are: Andrew Stewart, Donald Stewart, Mike Falkevitch, Ed. Falkevitch, Pete Pitts, Louie Long and Wilfred Simms.

Passing of a Pioneer

Griswold local of United Grain Growers Limited lost one of its oldest members with the death of John Skinner in his 80th year. Mr. Skinner had been a member of the local board for over 20 years and took an active interest in the Company's affairs. Mr. and Mrs. Skinner celebrated their diamond wedding anniversary in December.—*Griswold, Man.*

Dance to Honor Returned Veterans

A dance was held in the Woodstock School in honor of returned service men of the district. They were given a rousing hand clap at lunch time, and the crowd joined hands and sang "For They Are Jolly Good Fellows." Among the nine service personnel present was Allan MacTier, who returned some time ago from a Japanese prison camp.—*Penrith, Man.*

Veterans Re-united with Home Folks

In many homes already this year 1946 will be happier for the return home of loved ones who have served overseas for King and Empire and the cause of orderly human progress. Pte. S. Kashton, a veteran of Hong Kong, considered himself more than lucky to be able to be home once more. Flight Lieutenant Thomas Kiez arrived from India where he had spent several years. Other boys now happily returned are Cpl. Fred Muzykowski, Pte. P. Gerelus, Pte. M. Koualchuk and Sgt. W. Hubert.—*Oakburn, Manitoba.*

Broom Ball Game

A good time was enjoyed by all when the Langenburg Board of Trade challenged the Legion recently in a game of Broom Ball. The local hockey team is in full swing with many interesting games having been played or in prospect.—*Langenburg, Sask.*

A Busy Bonspiel

Saltcoats' annual open bonspiel, with over \$500 in prizes donated by the merchants and the curling club was a grand success and some keen games were enjoyed. The different ladies organizations prepared the lunches with all proceeds going into the Memorial Hospital Fund—a fine bit of co-operation.—*Saltcoats, Saskatchewan.*

Ship First Carload of Cattle

The first carload of cattle loaded at Clonmel in 1946 was shipped by Neal Bros.—*Clonmel, Sask.*

Fire Causes Burns to Garage Mechanic

In the fire that broke out in the Dallas Garage at Wawota, Doug Kenney, a returned war veteran and a mechanic, received burns about the face and hands when a gasoline drum exploded, spreading fire over the entire interior of the garage. The blaze was brought under control by a bucket brigade formed by the townspeople. Mrs. Dallas, owner of the garage, handles United Grain Growers binder twine and Bridge Brand Stock Minerals for the Wawota district.—*Dumas, Sask.*

Box Social for Returning Boys

A Box Social in honor of returning veterans was held in Clumber school and was well attended. The proceeds, along with that from other events held, are to be used for the benefit of the local Clumber boys returning from overseas.—*Bredenbury, Sask.*

Record Bonspiel

The annual Carman bonspiel held was the largest on record, 82 rinks being entered, 45 of them from outside points. The events were very smoothly run and furnished many keen and exciting games. The 'spiel finished up with a banquet in the Carman Memorial Hall where life memberships in the Carman Curling Club were presented to A. Malcolmson, Thomas Richardson, Dr. A. E. McGavin, Frank Bridge, C. A. Miller and A. S. Doyle. The speakers included Dr. Roy Snyder, president of the Manitoba Curling Association.—*Carman, Man.*

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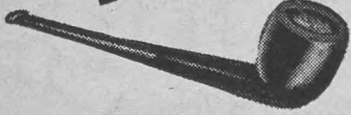
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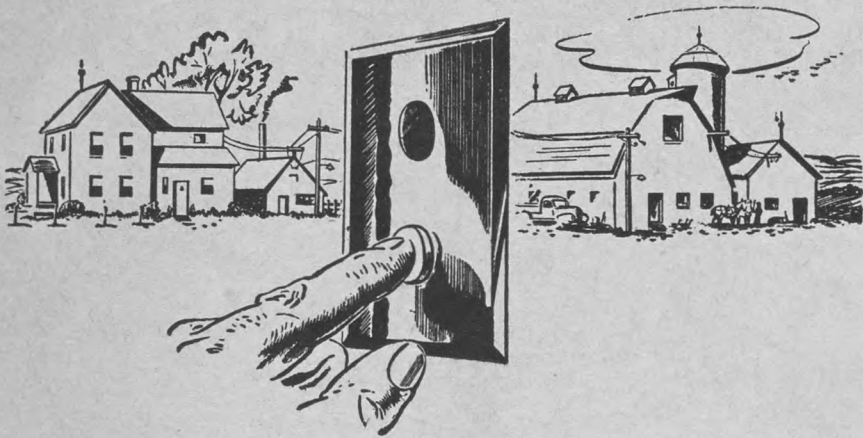
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Fairies of the Spruce Woods

By
KERRY WOOD



The common squirrel and the flying squirrel are cousins.

IF you want to see a fairy, go to a spruce wood some evening when the moon is bright, hide yourself in the shadow of a sombre spruce near a clearing, and stay quiet and watch. After a while a shadow may flash across the pale sky glimpsed through the tree tops, and you'll hear a faint thud as a small body lands on a tree trunk nearby. Next sounds a whisper of rustling feet as something scampers quickly up the trunk towards the tree top. Watch closely, now, and you'll see a small creature launch out from the tree top and go soaring gracefully across the moon-lit clearing to a swaying branch on the far side. And then you'll know that you've seen a spruce wood fairy—only, the proper name of the fairy is the Flying Squirrel.

Flying squirrels are quite plentiful throughout this well-treed Canada. Wherever there are spruce, pine or fir trees, there you can be sure of finding flying squirrels. They never seem to stray far from conifer forests, but Canada is an evergreen land and that makes it a favorite for flying squirrels.

Yet few persons have actually seen these interesting little animals despite their abundant numbers in our woods. The reason for this paradox is that the flying squirrels are sundown squirrels. They are truly nocturnal, and never stir from their dens until night is softly dropping its dark mantle over the forest. On a moon-lit night you have your best chance to see them as they glide across the clearings from tree top to tree base in long, graceful soarings that carry then fifty, sixty, and even seventy feet through the air.

Of course, everyone knows now that flying squirrels do not fly. They glide through space. There is a fold of slack skin on either side of their bodies between front and back legs, and by virtue of a special muscle development in the wrist of the fore-leg, this slack skin may be quickly tightened into a vane or flap on each side of the body when the animal launches out into space. The animal's tail is also utilized in the gliding travel, the tail being large and flatly shaped to act as a wide rudder behind the flattened body. They usually launch themselves from the top-most branches of a tree, soaring downward through space at a forty-five degree angle. Just before reaching the end of the flight the little creature makes a sudden, upward swoop and then flattens out abruptly against the trunk of the tree. Sometimes they come to rest on a limber branch which cushions the shock of their landing.

Our contacts with flying squirrels are mostly accidental. Like the time my friend Fred was chopping down an old dead tree, and after the tree had crashed Fred found a dazed little squirrel hunched in the snow where it had tumbled out of an old woodpecker hole in the fallen tree. Fred tucked it into a sweater pocket and took it home, and in a matter of hours that flying squirrel was so tame it was feeding trustingly from Fred's hand. They called the new pet by the appropriate name of Tubby. Tubby spent the day hours curled up in a dark box placed in a cage, but when evening came Tubby roused himself and whistled for attention. His cage was hardly a prison, for Fred let the little animal out every night and gave Tubby the freedom of the whole house. They fed him scraps of bread and cake, fragments of fruit, peanuts and raisins,

and even candy at times—that was before candy was so scarce! Tubby would crawl all over Fred's clothing and explore his pockets, searching for tidbits that Fred had hidden. Often the little squirrel curled up in Fred's pocket and had a nap during the evening, because in the house, of course, they had the lights on and Tubby would get fooled into thinking that the day hadn't come to an end after all. As soon as they put out the lights and went to bed, Tubby really came to life and had a great time exploring the darkened house.

Fred kept Tubby all winter, and the animal was a source of great pleasure to the family. But during the early spring Tubby got rather moody and Fred decided that the animal was fretting for the night woods. Fred is a kindly sort, so he carried Tubby back to the stretch of spruce woods where he had chopped down the old dead tree with the woodpecker hole that had been Tubby's home, and there Fred turned loose the little squirrel and Tubby went gratefully up a spruce tree and whistled softly in excitement over his regained freedom. And if I know Fred, he emptied his pockets of bread crusts and cake and a handful of nuts and raisins and heaped at the base of Tubby's tree in hopes that the pet would find the tidbits later on and think kindly of his former friends.

At our old home, which was close to a spruce forest, we used to see flying squirrels almost nightly. Just outside the kitchen window we had a shelf on which were placed crumbs and cracked grain and suet and nuts that our bird friends found interesting. All day long there would be a steady procession of birds coming to the kitchen window to feed, Downy and Hairy Woodpeckers, Chickadees, Blue Jays, Juncos, sometimes a Catbird and occasionally a Flicker and many a Nuthatch. After dark we'd hear a loud thump on the shelf and knew that a flying squirrel had swooped from a nearby spruce tree onto our shelf. Often we'd go out with a flashlight and stand near the shelf and turn the light on the squirrel. To our surprise this light did not appear to frighten the squirrels in any way, and they'd continue to eat the shelf food only three or four feet from the glowing head of the flashlight. We began to leave the kitchen blind up, so we could watch them from indoors by means of the kitchen lights. Sometimes there would be a terrific bang on the window-screen as a squirrel soared from a spruce top fifty feet away and flattened out against the fly-screen above the feeding shelf. Occasionally two squirrels would come at the same time, and usually that meant a fight or at least a vocal dispute as to which had the priority rights.

All the squirrel family are wicked fighters. The Eastern flying squirrels may be exceptions to this rule, for they appear to be more sociable and often a large number of them will utilize an old attic or hollow tree as a community home. But here in Alberta the Alpine flying squirrel loves its solitude, resenting the intrusion of one or more of its kind at the scene of a feast such as our feeding shelf provided. Watching flying squirrels over a period of years, I have come to the conclusion that they have definite avenues of travel through the night woods. It's been known for years that red squirrels have well-marked run-ways along certain branches that bridge the gaps between

Turn to page 54

THE VOYAGE OF THE GOLDEN HIND

Continued from page 9

The new bow-watch made his way past Nora and said to Hardeggon, "He says, 'Bring up the bottom!'"

"Bring up the bottom. Right!" Hardeggon looked toward the forecastle companionway and met the gaze of the cook, who nodded and backed down the steps to his pantry.

Waiting for his return, Hardeggon said, "Tis bad luck, Nora, for your Ambrose and the *Western Star*."

"Tis indeed, Dan."

No fear for the *Hind* herself drove the cheerfulness from their windstained faces. They knew which was stronger: schooner or gale. No, it was to the greying west that their eyes and hearts turned in sea-wise dismay. There, unless some mishap had already maimed her, the precious *Western Star* must now be creeping down the coast toward Cape Ann. Her exact course could not be known to them. That had been left to old Ambrose, who had been a skipper in his own right long since. It was for him to reckon how he should sail after he left the Seal Island Light behind him. Two general courses had been open to him. He might decide to drive straight across the Gulf of Maine and take his chances in the open sea. Or he might run from one harbor to the next, ready to take shelter in case of a blow. His job was to save the great keel and bring it to the melting-pot. Yet this storm had already risen in the west and, for all they knew, it might have swept between him and the land. And the land was of no great help under such a rig for off-and-on sailing.

Hardeggon said, "It's hauling to the westward."

"So much the worse!"

He lent a hand on the gripes that double-lashed the dories.

Nora fell quickly into a consideration of the new and fateful circumstances. The hurried movements of the dorymen, as they snugged down the gear, gave Nora much concern; for by the strength of the gale here, she could measure its strength beyond.

She became sullen. Their preoccupied faces made her so. A little while before, they had been eager for the fishing. On the voyage out of Shelburne, the prospect of getting some hooks down to the bottom had made the men gay. She was aware, too, that they considered her presence aboard as a guarantee that fish would be killed if they were found. There had been much happy and boastful talk in the foc'sle and sanguine calculations on the price of fish at Boston. Their pressing, irresistible habit of good fellowship had, to a degree, ironed out the 'longshore difficulties. Even Hardeggon spoke decently to Atkins when he had to, and he found no trouble, either, in working with the captain. Roades, too, put a good face on it and had driven the *Hind* skillfully to the place for her first set.

It was true that Nora, at first, had found their mealtime meetings a little trying because all hands seemed so openly intent on shaking off the queer forebodings and Jonah talk that had marked the earlier stages of the *Hind's* voyage. Yet she, too, despite the despair and doubt in her heart, had soon caught the genial infection and shared in full their anticipation of a certain harvest, and a quick one. Such a boon seemed certain to them all. Its certainty rested on nothing more than the direness of their need. Without a good stock this time and fair prices at home, the *Hind* couldn't go on. Neither could they. So every man worked hard at wishing the cod a good appetite.

"And now," she said to herself in the return of bitterness, "a game not worth the candle has been stopped again."

The cook handed Hardeggon a round, thick pat of butter. To make his old joke, cook waggled his head over the pat and said, "Bring it back, kid, when you're done with it."

Hardeggon gave the required shout of laughter and started aft. A glittering sheaf of spray slewed them around. He said, "Better oil up, Nora. It's coming along fast, I guess."

She followed him to the break and

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Capital Cities

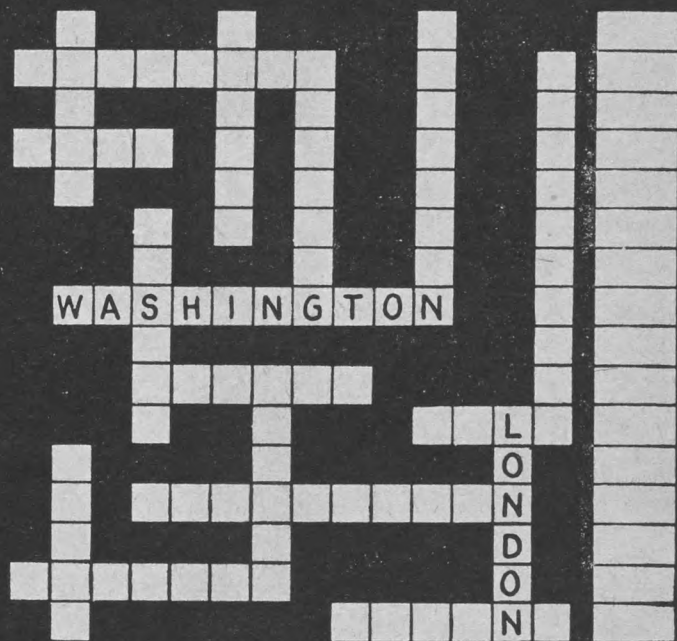
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B	—	7
C	—	7
D	—	4
E	—	1
F	—	6
G	—	5
H	—	8
I	—	1
J	—	8
K	—	8
L	—	4
M	—	3
N	—	3
O	—	1
P	—	5
Q	—	9
R	—	2
S	—	2
T	—	2
U	—	4
V	—	9
W	—	7
X	—	9
Y	—	5
Z	—	9

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watched while he jammed the butter into the hollow tip of the lead. He cast the lead far and let the line pay out. He worked aft a bit and presently hauled briskly, hand over hand. Without looking at the buttered tip, which would have been a breach of custom aboard that vessel, he handed it to the captain.

Roades turned the lead upside down, gazed at the tell-tale gravel, then touched it with his forefinger. He rubbed the finger back and forth over the butter. He frowned. The gravel wasn't fine enough. He knew where he was by this touch of his finger. It wasn't where he wanted to be.

"Forty fathom of water," said Hardegon.

"We're almost on it." Roades gave back the lead and added, "Heave her to. We'll have to ride it out here, if we can."

GALE and night met above her topmasts and wrestled there. Out of the last flare of day in the northwest, a purple cloud spouted and then soared, an immense rocket trailing sun-fire, from one rim of the world to the other. The blow fell upon the *Golden Hind* from that arch.

She sprang to meet it. The first boarding sea filled her gangways and forced her down until all the following seas piled on her. They came with the usual uproar to silence talk and send sighing looks around the cabin, to which Nora had been driven with the men.

The vessel cleared herself and came up to take breath full of frost and spray. No sooner had she shaken off that first rattling welter than another and larger sea came in over the same quarter and hit her like a thousand bricks. Her empty pens boomed loudly. This booming was succeeded by such a queer noise of rending that Nora, stretched out in her bunk, couldn't help raising her head. It seemed to her that some of the standing gear had parted, had cut across the deck like a scythe.

In the next instant, the tearing sound came again. This time it whirled against the darkened skylight and she knew that it was hail, driven down like pellets of iron.

The wind then began slambanging all around the compass and punished the schooner so harshly that even the dorymen in the cabin bunks became alert and showed some signs that they feared a freakish storm which might suddenly defeat them.

This oddness of the gale lasted so long that the vessel couldn't cope with it. She was at her wit's end. She failed to keep her head into it, no matter how the watch labored at her helm. The sea cheated their skill and gave the *Hind* such a hammering that soon it was plain a new thought was running in men's minds: Is this her last one?

The seas ran over her bow with such giddy force that it wasn't possible to keep a watch forward. They retreated and hung onto the wheel.

Captain Roades finally went on deck. A moment later, Hardegon followed, taking with him a coil of rope to lash himself to the wheel; for the watch was changing and it was his trick.

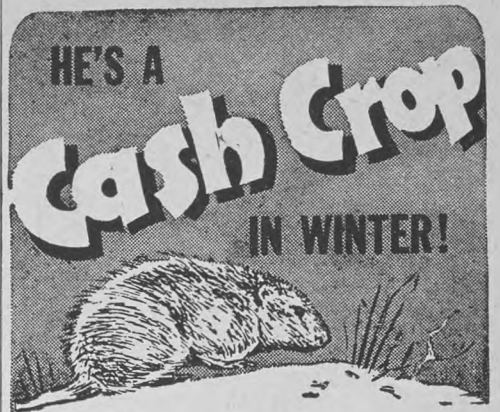
Roades came below. Nora, watching him anxiously, saw with relief that he sat down as usual on the locker to pull off his boots. He had only one of them free when the Lisbon, who was lying in the bunk just forward of Nora's slipped out and stood in his stocking-feet on that tipped and shuddering deck. He stared downward with such intensity that one might think he could pierce hull and keel and thus draw up some secret of the storm from the bottom.

Amidst the din, Roades shouted, "What say, you?"

"I hear! You hear?" The Lisbon fished his hand and, smiling in a queer fashion, beat slow time to some far-off, resounding music that he had chosen amongst all the other strains and discords. The repeated signals of his arm soon gave Nora the clue. Her own ear found the bass note in the west which increased in grandeur as the music-maker advanced.

Roades put on his boot again. He cursed under his breath.

The Lisbon let his arm fall. The rhythmic succession of loud notes had now emerged into one vast clamor. All lesser sound vanished. The great sea struck and rolled thundering on, taking the *Hind* with it as if she were a chip; which, indeed she had become, for all



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her hundred tons. Her lee rail went down and her stern sank in the same overturning whirl. The swift uptilting pitched Nora halfway out of her bunk. She clung on only by gripping the side with both her hands. She could look directly down into the starboard bunks. A shower of small gear and boots rattled across the cabin.

The Lisbon, who was hanging on to the companionway, looked sharply at the stove. Its door gleamed red.

The vessel whirled three times in that topsy-turvy style; then slowly, beam by beam, she found herself. Her hold began to boom her old chant again.

Roades staggered across the litter and joined the Lisbon at the companionway. Both the men stared up at the slide. Nora could tell that they were listening for a signal from the men at the wheel.

It soon came: three sharp blows against the slide. This meant that the helmsmen—Hardeggon and one other—lashed to the wheel in the loose Gloucester style that would save them from strangling, had hung on through the worst blow.

"Old *Hind*—she win!" The Lisbon rolled back into his bunk and closed his eyes.

That was the end of freakishness. There was nothing much left now, save the sou'wester itself.

The Lisbon lifted his head again and called out to Nora. To signify the change in his opinion, he smiled and moved both his hands outward in a flat gesture. He picked up a Sunday hat from the locker and tucked it away.

Nora pulled the blankets over her again. She lay there all the night, taking her forty winks now and then, while the *Hind* fought out the longer battle. The rising of the sun brought them a little ease. For a while, they thought the sun would scoff up the storm. It failed to do so.

The cook sent down a kettle of coffee and a bag of rolls by the hands of the foc'sle men. Hardeggon had rigged life-lines in the night and the men crawled along them.

The watches changed regularly. Weary under the hammering and the lack of the big meals which their strength demanded, the dorymen passed into the useful silence by which quarrels were avoided and work smoothly shared. Yet, despite this discipline which they laid upon themselves, the strength of the storm mauled them when the day waned. The hour came when the heave-to manoeuvre had to end.

"I never liked Emerald Bank this time o' year," said the cook to the captain.

The cook himself had brought down a kettle of tea and a crock of cakes. He had just come from the foc'sle, which was full of wise seamen. He himself was one of the best seamen in the fleet; and he always had time to do some thinking. For these reasons, his remark amounted to a suggestion from the crew. This was customary in the fleet, where the day's work had to be directed by joint experience and thought.

Some new move had been making up in Roades' mind. Between swallows out

of his sea-mug, he said, "Let her go." He spoke to Hardeggon. "She'll wind up on the Middle Ground, anyway, and that's a good place to be."

SO the *Hind* ran before the gale and made such handsome going of it that at daybreak Nora went on deck and saw the sky again. It was more black than grey, but it was beautiful to her. And, after the cabin's heat and used air, the spray had a good taste. She and Hardeggon worked their way forward until they reached their customary shelter between the dory-nests.

Once the schooner had settled on her course, no sea could catch her hard. She flew up their steep hillsides and toppled down at headlong speed. Two or three times, in the late afternoon, she buried her lee side to the hatches, but she cleared herself without trouble. About four o'clock, an airplane carrier and a screen of destroyers came up to the eastward. Half an hour later, the vessels changed courses and vanished in a wall of vapor.

It wasn't long after this hour that the bow-watch was able to take his place with safety. This man had hardly gone into the shelter of the furling jib before he came back and asked Hardeggon to tell the helmsman that there was a vessel under sail on the weather quarter.

"She's coming up fast, Dan," he said, "but I can't make her out."

This was risky business; for plenty of searoom was needed in such a gale, especially because the vapor was increasing here and there.

Hardeggon hurried aft and warned the helmsman. He returned and, with a shouted word to Nora, kept on going forward. He joined the bow-watch and gazed over the crashing tops toward the other vessel. Nothing could be made out in that wilderness. He came back, watched his chance, and then ran toward the main rigging. He climbed into it.

She watched him with anxiety.

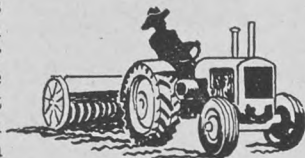
Several minutes passed. A flurry of snow blew over the *Hind* and hid him briefly. When she could see him again, he had his arm outstretched and his head turned toward the helmsman.

The helmsman lifted his hand and then gave the *Hind* a spoke or two to take her off.

Hardeggon twisted about in the rigging and looked at Nora. He couldn't send a word across that noisy deck; nor could he make a sign of any meaning. Yet, somehow, she knew that he had discovered a thing of importance to her.

She lifted her hand. She looked forward and saw that Billy Atkins had come up from the forecabin. He was standing near the bow-watch and was also searching the storm.

She began to work her way toward the break. The force of the wind struck her hard when she came away from the dories. She grasped the lifeline and hung on. She bent down and plunged toward the weather rail. She laid a hand



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2 tablespoons melted shortening
1/2 cup chopped raisins

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2 1/2 cups sifted flour
2 teaspoons baking powder
1 1/2 teaspoons salt
1/2 teaspoon soda

Beat egg well. Add sugar, molasses, milk, shortening (melted and cooled) and All-Bran; mix well; let stand until most of moisture is taken up. Sift flour, baking powder, salt and soda together; add to first mixture with raisins; stir only until flour disappears. Bake in greased loaf pan lined with

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on the main rigging. At that moment, the *Hind* lurched badly. Nora waited until she came up; then she climbed into the rigging until she lay alongside Hardegon. She thrust her leg through the shrouds and made sure of her hold. She twisted about until she could scan that great expanse of flying spray and vapor.

Hardegon struck her on the shoulder. He thrust out his arm again so that she could look along it. His hand pointed directly into a stream of vapor that was closing in from the northwest. The gale kept breaking into that stream and made aisles and frosty vistas in it, some shallow, some the depth of a mile. Hills of water, black-sided and white-ridged, surged down those vistas. In frantic confusion, swiftly looked from one opening to another, seeking the vessel that the watch had sighted. She swayed so violently in the crazy plungings of the *Hind* that she could not fix her gaze for long upon the area to which Hardegon pointed.

He shouted, "Hey!"

In anger or despair, he struck her sharply on the thigh. This made her twist her head toward him. In so doing, she caught a flash of dull light among the many flashes of foam and water pouring.

She clung to the flash. She followed it shrewdly in its dim pell-mell passage through a whirl of vapor. Judging its speed, she looked ahead until her gaze passed into an enormous cavern in the mist.

A moment later, the strange vessel careened into that cavern.

She cried in horror.

"The *Western Star*!"

Before she could say the name, the beautiful hull reeled out of sight. And all that Nora had left, for her pain and daring and hard-earned money, was the image of that hull: a bare deck, a broken foremast, a patch of mainsail, and a black, gleaming mound at her wheel.

The mound, she knew, could only be her Ambrose and his dorymen, lashed to the wheel and driving onward to a fate that she could foresee only too easily. Her fear had come true: the gale had come between them and the land.

Hardegon struck her on the shoulder.

She went down, inch by inch, to the deck. He stood by her side for a moment. They waited for the *Hind* to shake herself out of a pitch; then they ran for the shelter of the dory-nests.

Nora shrank against the weather nest; indeed, almost cowered there, her face held against a dory side. Hardegon had nothing to say. Nothing could be said. It was clear to her then that she had lost the next-to-the-last round of her battle. Unless all signs failed, five old friends were gone. Men who had stood by her for the sake of daring hearts. And the precious keel—it would go sliding into the old, eternal locker and not into the melting-pots.

She didn't blame herself. Neither did she accuse herself of the deaths of the dorymen. She knew that they were fated to die that way. It was what they were for; what they had been seeking all their lives. Constantly inviting such a death, challenging it. Now it had come. It was not a question of blame or remorse. It was a matter of pity. She hated with all her great strength the final image of their descent and surrender, their ultimate capitulation to the gale. She could see them bow their heads, could hear old Ambrose, garrulous to the last, even in drowning. "Salubrious, is it not, my friends?"

"To the galley!" Hardegon kept his arm around her. Before they ventured out, he held his icy glove under her chin and turned her wan face up a little. He shouted, "Remember the copy-book, chum!" By a nod of her head, she showed that she understood his allusion to the familiar command of their childhood: *Whilst there's life—there's hope!*

All hands soon had the news of the *Western Star's* derelict passage. It was recounted with poorly hidden satisfaction by Atkins, who, without hurting the truth, could say, "I told you so!" Roades learned it. No doubt, with satisfaction, too; although he still had enough manhood left in him to keep his face solemn. He did it with such poor grace, however, that Hardegon said to Nora, as he sat by her bunk that night, "I wish that guy would learn to blush

for himself. I'm tired of doing it for him."

THE *Hind* lay on the Middle Ground when the gale ran itself out. The Atlantic became green. Whitecaps filled the east. A blue wind came gently out of the west.

At once, the vessel took up her work again. Having given the sou'wester its due, she now proceeded to the next act in her own drama, her own skillful attempt to save herself. She might do it. It wouldn't be the first time she had killed thirty thousand dollars' worth of fish.

All the good habits of the Gloucester fleet came to the *Hind's* aid. The cook turned out a feast of beefsteaks and doubled the strength of the coffee. The icing on the chocolate cake was like fudge. The men ate and began to laugh. The grinned

at the vanished gale and said, "A good blow! Took us where we wanted to be." Old hands in the oldest of all the Republic's trades, the fishermen turned to with a skill perfected by Grand Bank centuries, to which they were the last heirs. They shouted words their ancestors had invented. Their knives flashed and sliced in the way their ancestors had found best. A man cried up and down the deck, "Bait up! Bait up! He says, 'Bait up!'"

Those that hadn't gone ahead on their own, tucked their pipes away and came on deck. Once again, the frosty herring came up by the tubful from the pens. The cutting-boards were laid out between the dory-nests and along the cabin bulwarks. Long, broad knives—a score of them—began the old tune: down the bait twice and thrice across.

Once the heaps of bait had started to pile up, ten men quit cutting and turned to the tubs of trawl. While their dory-mates cut on, these others uncoiled the trawls and began the rapid baiting of hooks, attached to the trawl line by shorter lines called gangins. They coiled the baited trawls back into the tubs. Sidewise sweeps of knives sent the herring-heads flying and rows of golden herring-eyes, full of tardy suspicion, stared from deck and scuppers.

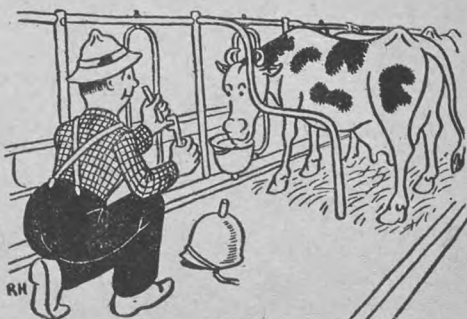
With shovel and broom, Nora turned to the greenhorn's job of cleaning up. She briskly heaved the scraps and heads over the side, where the gulls fed. The knives struck faster and faster until their blunt tattoo rang louder than the gay talk and the shouts to the men in the pens. The talk was gay, so gay that at times it became a chant of little meaning, except for the hope of happiness thus repeated. Yet the chant fell short of song. No man ever sang a song for a Grand Banks harvest; and no man's ever made one. Nor will now.

Within the hour, the first cry of "Enough!" was raised and the trawl tubs began sliding toward the dory-nests.

Number One dory had been the Corkery brothers! To it, Hardegon and Atkins dragged their tubs, fresh chunks of herring gleaming on the topmost coils and hooks.

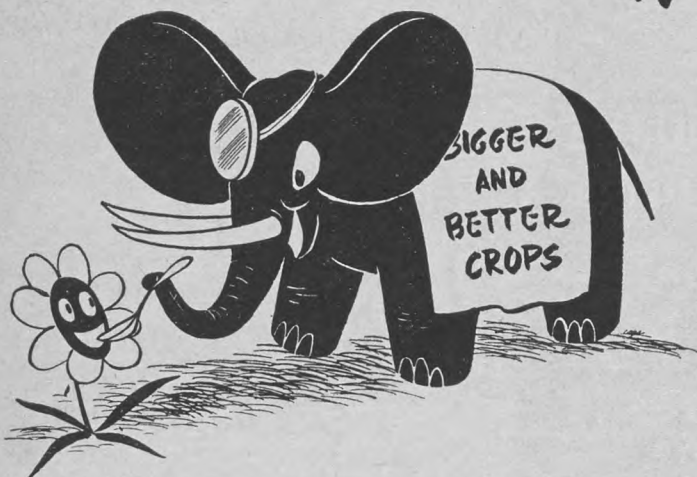
The other dorymen stood by the lee tackle and swung Number One up and out to the rail. Hardegon and Atkins finished the stowing of their gear: trawl-tubs, buoys, sail, oars, anchors, water-bottles, conch horns, gobsticks and gaffs. And a bag of bread, too, for this was the *Hind's* way in winter fishing because it was the perilous season when dories might be lost in vapor and have no choice except the long row to land, and sad failure the usual portion.

Half in the dory, half out, Hardegon lay poised on the gunwale with the black keg-buoy in his arms, its blackball—a flag marked I, flapping in his face.



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Eager to try his skill again after a long absence, he kept his graceful perch until, "Buoy away!" Roades shouted and jerked his arm.

Hardeggon flung the buoy down into the sea. He and Atkins took their places: Atkins at the oars, Hardeggon aft at the first tub of trawl.

"Dory away!"

Number One dropped into the stream and the *Hind*, under foresail only, ambled on against the tide.

Hardeggon threw over the anchor that would hold the buoy in this starting-place and looked up to the captain. Roades held out his arm to the southward and the dory moved off in that direction.

Once away, Hardeggon let out a whoop. He waved his left hand to Nora and with the other he deftly slipped his heaving-stick, a willow wand, into the topmost coil of trawl. He flipped it up and outward. The baited hooks began to fly and soon the first string of the mile-long trawl, with its hundreds of hooks, was slowly drifting to the bottom fifty fathoms deep.

The first tub emptied of its strings, Hardeggon knotted the second tub's length to the heaved trawl and kept on heaving. By that time, the *Hind* was growing small in the west and all her twelve dories lay at work on the southerly set, the rowers bending back and forth, the heavens gracefully up and down.

This was the old flying-set, as practised on the *Golden Hind*. And, since it had been Hardeggon's first work in the fishery when a boy, he rejoiced in it. So much so, indeed, that he could pull out a grin or two for his dorymate, who had been out a dory ever since he got a site aboard his first dragger. Some years ago, that was. "You making out well, Billy?" asked Hardeggon.

Atkins grunted over the heavy oars. "She's cranky—this dory is."

"Corkery never found it so."

Atkins growled at this allusion to the man who had once sat on that thwart.

Hardeggon laughed and said, "She won't be cranky, once we haul a few good cod into her. And I think we will." He paused a split second in his heaving and looked sharply at a hook hanging over his stick. "You cut bait a little fine, Billy, my boy. I'll tell you that for next time."

Atkins chose to ignore this. He said, "The tide's strong here."

"No stronger than it was a hundred years ago, I guess. You want me to spell you at the oars?"

"Heave away!"

COMING now to the last coil in the last tub, Hardeggon knotted the trawl to the anchor line, which was fast to another black buoy. He heaved the gear over and signed to Atkins that he should ship his oars. This done, Hardeggon set up the little mast and unfurled the leg-o'-mutton sail. He brought the dory around with a steering-oar and she began her homeward run. Atkins lay down on the bottom boards to keep out of the wind, which had a bite in it.

Number One, as usual, was the first to finish the set; despite the greenness of its men. The others were not tardy. Soon their little sails appeared at varying distances. It was a handsome sight. A few of the sails were old and stained to a yellow hue by sun and salt. Some were new white; and, far beyond, a blue sail and a green sail gleamed, making the day a gala one and all these craft a Cape Ann regatta.

Farther to the west, her foresail beaming in the sun, the *Golden Hind* began her turning toward the first buoy. Hardeggon also steered to that buoy, which was his. Long before he could make out Nora at the *Hind*'s helm, he saw his bouncing keg. He tied up to it to await the fishing signal from the captain, to whom it was left to judge when the cod had had time to finish luncheon.

It was while he was furling the sail, and making the empty tubs ready to take in trawls, that Hardeggon discerned in Atkins a mild animation, a queer, tentative sort of liveliness. It was enough. No more was needed to sharpen Hardeggon than any sort of cheerfulness

from Atkins, Roades, or Captain Parran of the *Doubloon*. They were all sharks to him; and they livened up only when there was blood in the foam.

As soon as the dory was fast to the buoy, Atkins had gone back to his thwart. There he stuffed his pipe and puffed away. A true draggerman, he was happiest while sitting down. A little later, he grunted in a pleased, shoatish way. His pleasure was too brisk, even for such a pipe as his.

Hardeggon figured out soon enough that Atkins had seen something that he himself hadn't made out yet. At first, with a thrill that pierced him keenly, he surmised that the rascal had caught sight of some sign of the *Western Star*'s wreckage. He tried him out on that score, but he could make nothing of the grunting and spitting which came in reply.

In the natural course of his suspicious thought, Hardeggon struck on Parran and the *Doubloon*. He said at once, "The *Doubloon* must be dragging hereabouts by now. Parran said he'd be here."

This ordinary conjecture must have seemed like alchemy to the stupid Atkins. He dropped his pipe to the

bottom boards and cursed in a wail. He wasn't smart enough to keep his eyes off the sea; that is, if it was his foolish hope to hide something from Hardeggon. He shot a sideways glance to the eastward.

Hardeggon stood up and looked in that direction. A dragger steamed there, black amidst the blue and white.

"Why," said Hardeggon, "there's the so-and-so now, I do believe!"

He spoke in cautious cheerfulness, lest the draggerman observe his agitation. The arrival of the *Doubloon*, although expected, was not good news to Hardeggon. He had his share of seaman's superstition. He really regarded Atkins as a Jonah, a source of evil luck and sorrow. And, rightly enough, he considered the *Doubloon*'s captain as a sort of master Jonah, from whom worse luck came.

Under such circumstances, Hardeggon could be as mean as any man. He had a bitter tongue in his head; and, although he could be silent on such near things as his five-inch mesh, he never could lay off a shirker or a crook. Now the loss of the *Western Star*, and the prospect of seeing Parran and Roades take the *Hind*, angered him, just as Nora's unspoken sorrow had saddened him.

He faced Atkins blandly and said, "Ever see a man hanged, Billy?"

As he spoke, he ran a finger inside the collar of his black sweater in a wicked gesture. He also thrust his tongue out and let it loll horribly.

"Hanged? Good God! no! How could I? See a man hanged? Why, no! No!" The picture did some damage to his complacency. He said "No!" again.

Hardeggon put on a rueful look and said with a sigh, "To chuck away a man like that! Dear me!"

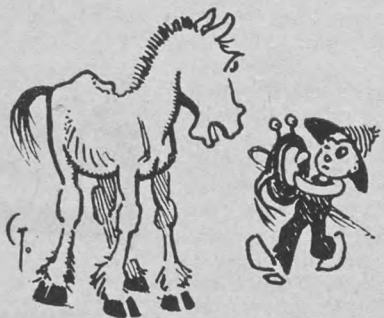
"Chuck a man away? Chuck who away? What the hell's wrong here, anyway?"

"Why, nothing's wrong, chum, nothing. Only I had that dream of mine last night again. About Nora's father. And he was standing by a gallows. Or under a yardarm. I couldn't make it out, Billy. But he was pulling that old joke of his. You know—'If they hang you, my friend, somebody's going to suffer!' Ha! Ha!"

Hardeggon peered under his hand and murmured, "It's the *Doubloon* all right. I only hope that chump doesn't drag his lousy bag over our trawls. If he does—I'll kill him."

"Hang?" repeated Atkins. "Hang?" His own rich stream of superstition had been well stirred. He was seeking an omen. "You saw somebody under a yardarm? That's what you say, is it?"

"Bless my soul!" Captain Hardeggon pretended a mild surprise that his dream life should be interesting to anybody else. "Bless my soul, Billy!" He held up his words skillfully and thus made it clear that, much against his will, he was being cajoled into a revelation he'd rather not make, especially to a party on the anxious seat. "Now that you ask me—and I make the effort to



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recall—why, yes, Billy, there was a face above the noose! Not what you'd call a pretty face. Nor a happy face. No! But a face, nevertheless." He had drawn Atkins into a dogfish gape by this time. Hardegon put on a graver air. "Of course, a man can't be sure of a face in a dream. But—" A roller struck the dory and gave it a dip.

Atkins cried, "Whose face in the noose? From a yardarm? Hell! That's a pretty yarn to tell a man! And you can't remember, eh?"

"I didn't say that, Billy. Oh, I can remember, all right! I just said a man can't be sure of a face seen in a dream. Say you kiss a woman in a dream. Or she cottons up to you. Well—take my advice!—don't act too hasty on it the day after." He saw that Atkins was too frightened to repeat his question. So he said in his judicious style, "You know, Billy, there's some truth in dreams, after all. Because I happen to know that you can be hanged for crimes committed at sea."

"Me?" Atkins pushed some spit on to his lips with his tongue. His Adam's apple jerked in the now-you-see-me-now-you-don't style.

"You?" Excuse me, chum. My mistake. Excuse it, please. I used 'you' in a manner of speaking. A general sort of way. I meant a man can be hanged for crimes at sea. That's all."

"Aye!"
"As for that face, Billy, I'll tell you whose it was. Pass me your word first that you'll never breathe it to a living soul."

"Aye!"
"Tell it to a ghost, Billy, if you like. Happen you meet one real soon. But not to a living soul. Hey?"

"As God is my judge—" he began vehemently.

Hardegon gave him a solemn signal to stop. "That face, Billy, a-hanging there under the mid-day sun, was Parran's"—he halted—"or Roades'—"

Atkins groaned when Hardegon kept on.

"Or, if not one of those two thieves, Billy, then—"

Atkins thrust his hands down to the thwart to keep hold of the world.

"Then it was—" Hardegon, for once in his life, didn't know what to say. He was stumped. He wished to say, "Your face, Billy boy!" but, by this time, the sweat on that crumpled forehead and the agony in Atkins' eyes had stirred up his pity. He laid off. He said, "Then 'twas Corkery! John Corkery's face!"

ATKINS gripped the streaming thwart and screamed. His face changed from the drawn look that his agony had put there. It became distorted. "He won't! He won't get me! I'll rip him first! Gut him—by the God that made me!" His teeth were hidden in foam out of his mouth. "I had nothing to do with her. I was there—oh! Nothing, Dan! So help me God!"

It was Hardegon's turn to be frightened. He was about to ask, "What had you nothing to do with? when he found a sort of answer to his own question. He surmised that John Corkery, now serving on the approaching dragger, must have told the *Hind's* people about some devilry done by Atkins and Roades and Parran. It was more likely that the harsh tongues in the fore-castle of the *Hind* had said something to Atkins. Had Hardegon heard from Nora's lips the story of the murdered Yarmouth woman, he might have put two and two together and thus made up the sum he now puzzled over. However, Nora hadn't told him that story yet, no more than she had told him why she believed Roades had refused to kill fish. Hardegon, in fact, didn't know whether Atkins' word "her" meant a woman or a ship.

He was bent on a good-natured rescue of Atkins when two blasts from ships' horns bowled by him, the first from the east, the second from the west. Both were fishing signals. The *Doubloon* had finished its hour-and-a-half of dragging her net across the bottom and Parran had blown his horn to order his men to get the winch going and haul the bag to the top.

Hardegon saw the *Doubloon* increase speed and steer sharply to leeward,

which was the side she was dragging on. The *Doubloon*, having closed the mouth of her net by this twist, began to haul it up. He heard the rasp of cables and winch. He saw how taut the wire cables of the net were at the rail and he knew this meant a good bag.

Since his own captain had also blown the fishing signal, Hardegon cried, "Here we go!" and then, "Forget what I said, Billy. 'Twas only a dream." He then went into the bow and put on horsehide half-mitts, which were to keep the trawl line from cutting his palms. After placing his gaff handy, he leaned over the gunwale and brought the buoy and anchor in.

He began to haul. The first rush of hooks were empty. A few had the bait on. He slatted the baits off against the side and kept passing the line back to Atkins, who stood amidsthips over an empty tub. Atkins took up the trawl and coiled it into the tub again.

Almost at once, Hardegon found that the *Hind's* luck had changed. His first fish was a fine, fat cod. In his eagerness, he handled the fish a little roughly and the hook worked out. The cod fought off. Hardegon struck out with the gaff and nailed him in the eye. He jerked the fish into the dory and shouted, "Luck's in! Now for full pens!"

He hauled with care and finally got the trawl coming up with such smoothness that he slatted off fish after fish before a few dogfish struck in. Hardegon, like all dorymen, hated the dogfish. There were the curse of the Banks. He never could bear merely to shake them off the hook and let them live to destroy more bait. He kept his knife handy and slashed off nose or tail from each one as it dangled. He killed twenty or thirty or them before the run changed and some fine haddock came up.

After a few more bare hooks, he felt an even harder strain below. It was the tug of a great halibut. The moment he saw the huge, precious flatness circling deep in the green, Hardegon let out another whoop. This was answered from the next dory. The exulting cry swept all along the line. Hardegon knew, by these repeated calls, that all the dories were killing fish fast. He gaffed the halibut, hauled it over the gunwale and sent it thrashing down into the mass of cod and haddock, piled in bloody water.

Now came Atkins' turn to haul. Hardegon was already slowing up. A long time had passed since he had put his back into that work. The strain told on him. His cheeks ran with sweat. His arms ached.

Yet he was so glad to be killing again that he couldn't stand Atkins' clumsiness when he took over. Hardegon dropped the coiling trawl and gave his dorymate a harsh word for slow work.

"Once a draggerman—always so! Why the hell don't you haul?"

He drove Atkins out of the bow and finished hauling himself. By the time the dory reached the outer buoy, it was full to overflowing. He secured the buoy and hoisted the sail. Once under way, he scanned the westward sea. Two other sails had been hoisted, but he had the start on them and came alongside the *Hind* first of all, his sail down, his painter ready.

He flung the painter to Nora. She gave it a turn. The cook brought the dory around with a boat-hook and Roades handed down the pitchforks. He made no comment on the load of fish. Nora and the cook were overjoyed.

Hardegon had kept the big halibut on top. It weighed well over a hundred pounds. He now drove the tines into it and heaved the prize into the checkers that had been set up to form pens on deck. The moment the big fish struck aboard, he cried out, "One for the bank!" And to Nora, he said, "See your friend coming up?"

Nora put a strain on the painter to keep the heavy dory in. She gave a sour glance at the *Doubloon*, which was moving off to eastward, and replied, "I see Parran all right. And I'd rather see this!" She jerked head toward the load of fish.

From that moment, there was no time for anything but fish. There was time to breathe. That's about all. Dory after dory came up, to one side or the other,



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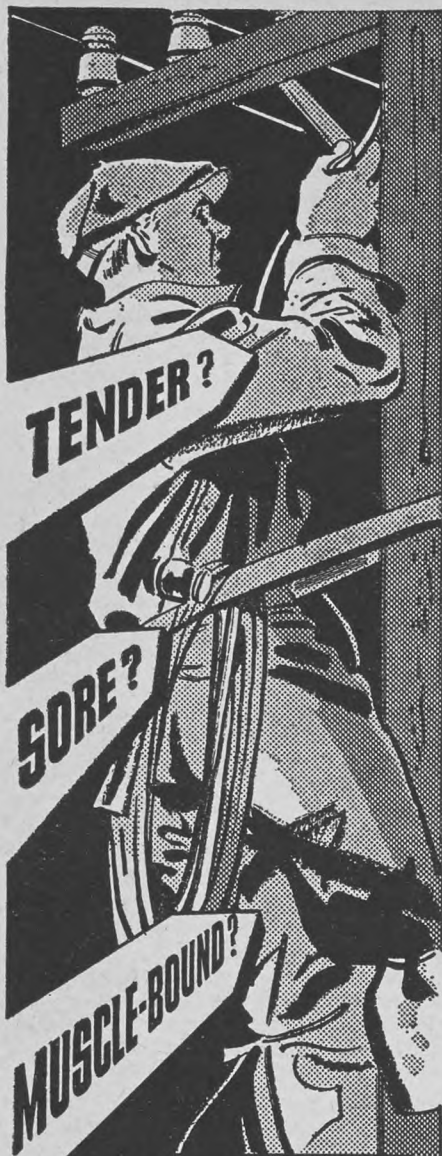
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and the forks kept the cod flying. Long before evening came, the *Hind* had fifteen thousand pounds in the checkers.

The dories were back in the nests. The dory-plugs were out and the pump sent a stream up to carry off the darkened water that poured out of them.

Without a break in the intense rhythm of their labor, the dorymen set up cutting tables and troughs to carry off blood and guts and catfish heads. Rippers and gutters took their places. Knives flashed again. The dressed fish flopped into big tubs, where the idlers stirred them, washed them, and forked them toward the hatch. Just as the last fish slipped into the pens, the cook called the first gang to dinner.

The *Hind* was certainly alive now. The men were more than ever joyful. All their hopes seemed justified and the last signs of uneasiness vanished. Even the presence of the *Doubloon* failed to mar their pleasure. Yet the nearness of that vessel left its mark. Captain Roades had fallen into the listless mood that Parran always created in him. He had gone down to dinner with the first gang, as usual. He had hardly taken a mouthful of soup before he muttered something and left the forecastle.

His action brought on another, which, in turn, led to a crisis. Ordinarily, a captain's moods, and especially his behavior at table, are not open to comment by dorymen, despite the familiarity created by the intimate part he takes in the ship's work. In the case of Roades, this convention had always been observed, the more strictly because the men weren't overfond of him. Of course, there was no telling what the men said of him while they were out hauling. Aboard, they kept the rule.

At his abrupt departure, the ill feeling that his secret actions had created forced the men to burst through the barrier of habit.

A MAN seated next to the Lisbon put down his spoon and watched Roades' boots drag up the steps. This watchful one was the oldest hand on the vessel and had once been mate on the old *Columbia*. He commanded respect, and not only because of his grey hairs.

When the slide had closed, he looked about in a deliberate manner until he had forced others to look at him. He then spoke in such a way that it was plain he intended to answer his own question if no one else did. He asked in a loud voice, "What's the matter with him now?"

Hardegon, fully aware of trouble ahead, lightly touched Nora with his elbow and, in order that all things should be clear, asked brightly, "What's the matter with whom?"

The doryman understood this device. He replied, "The captain. Is he off his feed?"

At this, the others stopped eating. A few bent forward to look at the speaker. Others gazed solemnly into their plates. The speaker went on, "Here we have a couple of pens full, at last, and it puts him off his feed."

So far, his tone might have been taken for one of vexed solicitude for a shipmate. Knowing this and not wanting it, he changed to insolence. He said, "Maybe he doesn't like the smell of fish."

This was nothing less than an accusation of Roades. The words could have been laughed off. No one laughed. Consequently, Nora, as the owner of the schooner, had the issue squarely before her. She knew that they all believed Roades had betrayed them and her by not doing his duty. Obviously, the rebel meant to say that Roades had stopped them from killing fish before and was likely to do so again. This was a destruction of their livelihood and they wanted to know why.

Nora said, "Make your meaning clear, Clem. You're among friends."

"I know that, Cap'n Nora." He deliberately finished his soup and sopped out his plate. "A short and simple answer from a short and simple man. That's what you want and what you'll get. Here it is, miss. Three times in the last two voyages that captain of yours has hauled up and left good fish behind him. We all know it. Always some kind of reason, but no good reason. No man here will deny it."

He paused. No man made a denial.

He went on. "I don't know anybody who's ever been in a dory with him and

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I don't know too much about him otherwise. But I know he's been drinking aboard this vessel for a long time and I know we could have brought home a hundred thousand pounds last trip. And we didn't! No! Instead of that, we lose a good fisherman—Jim Corkery—and come home owing the vessel money again. Now what we want to know is: Why?"

Nora answered at once. "I know. And I'll tell you." She gave them a reassuring smile to divide amongst them and pushed a tray of halibut steaks toward old Clem. "No reason why we shouldn't eat just the same. Scoff it up!" They all fell to again and she said, "What I say can be repeated freely to the other gang and to men on watch."

"Except," said Hardeggon coldly, "to the foul Jonah—Atkins."

"Very well." She then told them all she knew, all she feared. Most of her story, as she was well aware, had been known to them already, or suspected. She told them flatly that Captain Roades was Parran's follower.

Hardeggon bent his head over his plate. Her knowledge of this fact was news to him.

She told them of the hundred thousand dollars offered to her by the syndicate for the *Golden Hind*. She described her refusal. At this, they murmured and became brighter; because they were learning again the kind of wood out of which she was carved. She told them of all the money the vessel owed to Parran and made no bones about declaring that, if the trip failed, he would be able to take the vessel away from them. It's either Parran or the West Indies. Full pens and a high price at Boston might hold her for a while. Nothing else! I hoped that the *Western Star* and her keel would turn the trick. Now she's gone and that leaves it up to us."

She paused and fished out a steak for her own plate. "As to how Jack Roades falls so low as to take dirty orders from a dragger captain like Parran—and takes whiskey aboard my vessel—well! I'll leave that part to those amongst you who know the Yarmouth story and some others. It's not a tale a girl will foul her mouth with!"

Hardeggon jerked up his head. "The Yarmouth story?"

She gave to the Lisbon a special look which signified that she was leaving that part to him. He nodded.

"I'll tell you this much more," Nora continued. "I came along this time chiefly for the *Western Star* venture. I really didn't have the money to pay a railroad fare and I had to get those poor men along with me. I stayed aboard after we took bait because I figured out something was wrong and I thought it my duty to find out. Poor Ambrose told me 'twas my duty to you and to the *Hind*."

"I think I've found out the truth. Let us bear this in mind: there's a war between us and Parran, between the *Hind* and the *Doublon*. And our captain—God help him!—isn't on our side. Neither is Atkins." She pushed her mug toward the tea kettle and waited until old Clem had filled it. "I want to tell you that I know times are changing. The

Banks are changing and markets are, too. I know why you stay dory-trawling. Why you like it. It's your life. And nature provides that only a fair-sized fish will eat a bait. A baby fish won't. Or can't. That's why we don't have to be ashamed of what's in our pens tonight. We're not destroying the fisheries as that fool Parran and some others are doing, killing little fish with nets for the sake of a fillet of flesh. But nature provides, too, that an under-sized fish can get through a decent mesh and live. Some draggers want them. They'll all come to it, just as the English and the Danes did." She turned toward Hardeggon. "This man here gave up the draggers and the big money and went back into a dory because he wouldn't destroy what nature gives to us all. He has his ideas. You know what they are as well as I do. The five-inch mesh he has on my wharf won't kill small fish. Well, chums, if ever we get home and are free men again—maybe this is the man that will go skipper of a new *Hind*. And if we get the money—if we beat Parran here—maybe she'll be a smart dragger, after all. I can't tell yet."

She turned to Clem and was about to speak again when he began. He spoke for all of them. He said in a sober tone, "This is fair talk and useful, good talk. All here will stand by with an eye peeled and gaffs ready." He let a measure of happiness return to his face and added, "As for Dan Hardeggon here—well enough! He's a good man aboard a vessel and as fond of the *Hind* as we be. But I do wish you'd go skipper of her yourself, Cap'n Nora!"

She joined their laughter, which was good to hear, and said, "What about the fish that are on the feed now? Do we get them tomorrow or will we be foxed out of them?"

"Get them! We'll kill forty thousand!"

Hardeggon said, "On the Middle Ground this time of year—tides and winds being what they are—we'll be needing a mark-buoy. It's a thing I don't like, as a rule, but thereby we'll not have to take any man's words as to where the fish are and where the vessel is lying."

"Go tell that to the captain," said Nora, "and see that it is done." She ate the last of her bread pudding and stood up. "Or, better still, I'll tell him myself. And some other things."

ROADES had already given the order for the rigging of a mark-buoy. Despite the tragedy which had attended the setting of the *Hind's* last buoy by the Corkerys, he understood that one was required for the Middle Ground tides.

When Nora came down into the cabin, he was lying in his bunk. Atkins was seated on the locker near him, a set of dry cell batteries before him. Either he or Roades had picked up a lot of junk at Shelburne for just this purpose. There was a good supply of old lifebelts and electric bulbs handy.

They greeted her with cheerful nods. She answered by hoping that Roades was feeling better.

He replied, "The truth of it is, Nora, that when I fast—as I did during the blow—it takes me some time to get back



M. Beaudon.

on my feed. I'm all right and I'm obliged to you for your kindness."

This was said with such perfect grace that at once she wanted to disbelieve all that she had heard of him and all that she feared.

She sat down on the locker opposite them and gazed idly at Atkins' clever hands working the gear. She knew he had a good reputation as a rigger of such buoys. It was the only good thing she had heard of him. He made them in such a way that they stayed upright and didn't sag. They stayed put, too, over the fish.

She watched him closely, yet she lifted her eyes frequently to trace the changes in Roades' handsome face. He seemed to be more than usually interested in Atkins' task, and kept hustling him on with impatient exclamations. His listlessness had gone and this new animation obliterated the unpleasant droop of his mouth which she had seen earlier in the lamplight of the foc'sle. He kept running his hand through his matted yellow hair—an old familiar gesture. Suddenly, and without a reason that she could hit upon, Nora remembered with violent intensity the times when he made love to her; times when she, with willingness, had reciprocated. She hadn't felt this way for a long time—not since the mystery of his secret doings had drawn him into himself and away from her.

She instinctively let her eyelids fall halfway and kept her gaze a while on her boots. The nearness of this once-loved man, despite the barrier of mistrust that now separated her from him, and the knowledge that, at any moment, she might find herself alone with him in the cabin, brought her swiftly to her feet.

He delayed her smoothly. "Stay a while, Nora, please. I've something to say to you."

He gave his voice the quality of weary frustration that often marked it after a long, fruitless voyage.

If she had had her wits about her, she might have seen that this was an act he was putting on. But the image of Dan Hardegan, at the helm above her head, flashed through her mind and she couldn't be hard. She had wavered between the two men so long that, even now, knowing all she knew of Roades' evil past, she hesitated. But only for a moment.

One decisive physical movement would get her started up the companionway, she supposed. She made the effort and stretched out her hand for her oilskin, hung near the locker. The schooner rolled briskly just then and before she could stand straight, Atkins was scurrying up the steps with his buoy gear and Roades was at her side, hands raised in a sort of supplication.

The image of Dan Hardegan vanished from her mind, to be replaced by a magical reproduction of the Yarmouth beauty Roades and Parran had shared—if the Lisbon were to be believed—flung down bloody into a drift of snow.

"Snow?" she asked herself. "No one told me there was snow! Why, it was June!" She was puzzled within, yet she wanted to hear Roades talk of this woman. If he dared.

She began to tremble and Roades mistook this for something in the sweet surrender line. He moved to put his arms around her and she stepped aside. Something in his manner made her sure now that his impetuosity was a fraud, that he had quite another purpose than the old one of exciting her.



Porky: "He seems to want them in this furrow—Here she goes!"

Well, she'd had some lessons in duplicity lately and could pretend a passion, too, if it meant an advantage in the defense of the *Hind*. She forced herself to melt a little, let Roades brush her lips with a kiss.

This, apparently, was the signal for him. "I'm in awful trouble, Nora," he said. "Awful trouble." Theatrically he struck his hand against his mouth. "I'm the first skipper of this vessel that ever took whiskey aboard her. I can't help it, Nora. I lied to you a moment ago about being off my feed. I'm in trouble."

She backed away from the ring of lamplight in order to clear the way for her eyes. "I know you're troubled. What is it, Jack?"

"Parran!" He sent a wild glance toward the blackened skylight, as if he might see the glare of the *Doubloon's* deck lamps there. "I didn't want to tell you but—well, Nora—I'm like the *Hind* herself. I owe him money. Lots of it. I owed him money the day I first saw you three years ago. More now. And he's putting the gaff on me."

"How come you to owe a man like Parran so much money?"

"The same way you do!" he replied swiftly. "I haven't earned any aboard this vessel for a long time. You know that too well, Nora. And I needed it. Badly."

"You've a reason for saying this to me, Jack. You know I haven't any money. I'd have given some to you, if I had any. The vessel owes you plenty. You'd have gotten it all if the *Western Star* thing had worked out. Why do you tell me this?"

"There's no beating him! No beating Parran. Your grandfather owed him too much. You do, too. Sell the *Hind* to him! He told me—he'll give you as much as the syndicate offered—a hundred thousand—and more. He can't build a vessel now and he can't buy one. He's mad for the *Hind*. Give it to him, Nora dear. And let's clear out of this mess!"

"No!"

PLAINLY he hadn't had much hope when he began, because he at once changed his tune. At first he begged her to say that she would at least consider giving up the vessel to the *Doubloon's* captain. But now he had become aware of the intensity of her gaze. Knowing her shrewdness, he hid his desperate eyes from her by turning into the shadow beyond the lamp.

There he attacked her with reckless words. He accused her of sending the *Hind's* men to the risk of death in winter fishing in order that she might meet the whim of her grandfather. He straightened her up with, "Worse than that, you killed five good dorymen in that crazy venture with the *Western Star*! You didn't trust me. You shamed me in front of my men. A secret from me! Had you said one word to me—I'd have fixed it for you. You could have gotten your money right there in Nova Scotia."

His allusion to the drowned Corkery enraged her, especially because the Lisbon's version of that death was uppermost in her mind. She stopped him with a scornful gesture. "You are calling me the murderer of five good men! Well enough to say so now!"

She took a stride toward a bucket of drinking water by the stove. "Let me show you something, Captain Roades!" She lifted the pan to her lips, filled her mouth, and then spat the water out at his feet. "Know what that means, don't you? You have made me disgusted with myself!"

This unseemly action startled him. He said nothing.

"There may yet be something to be said about the *Western Star*," she went on. "Those were men on that hulk!" She gave him another portion of her scorn by a stress on the word men. "As for keeping the *Western Star* in Shelburne a moment longer than was necessary—why, you know damn well that old fox Bannister would have dragged me through every court in the Dominion! Years! Years! Oh, you're an ass, Captain Roades!"

She struck her hand harshly against her jacket. "I've got her papers here. And that's all there is to it. All, do you hear? I've lost my faithful friends, my fifteen thousand dollars that I hoped to make, and the five hundred I gave that filthy crook. But I was right. Right all the time!"



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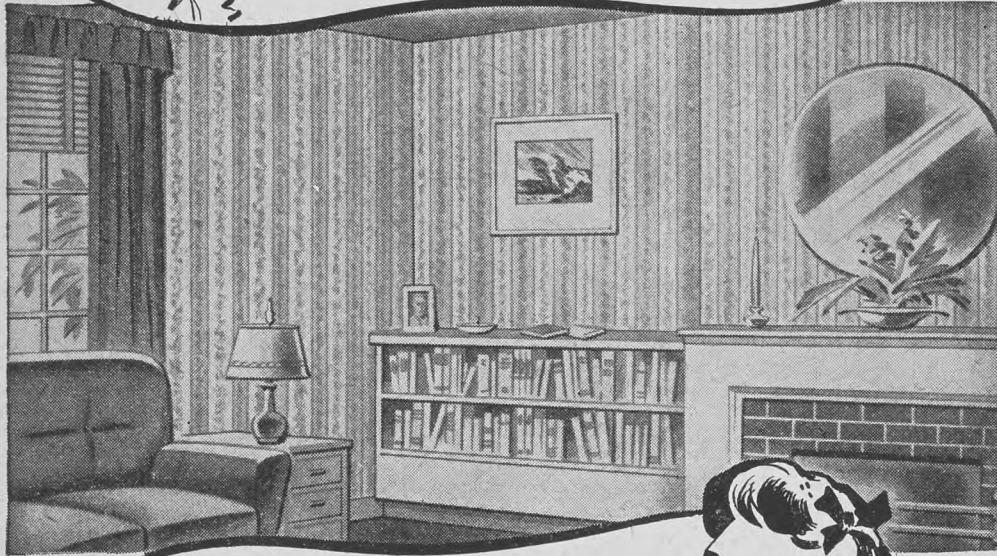
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Nora could now see that her anger had taken her off her course. She returned to it by saying in a calmer tone, "I stayed below just now because you asked me to. You started to tell me what your trouble is. Your other trouble. It isn't only debt that Parran holds over your head. Is it? After all, he can't do too much to you on that score. What is this other thing?"

His response, by shifting eyes and fumbling hands, was so genuine in its terror that she became convinced he had, indeed, been led into some frightful danger by Parran. She became certain that there was truth in the Yarmouth story, even believed that there were other matters of life and death which held him in thrall. Thereupon, she put him down forever in her books as a weak, ruined man, who could not help being her enemy. She said to herself bitterly, "He will destroy me to save himself. And he can do so!"

Since he again failed to reply in words, she lied to him once more by saying, "I don't know what the story can be. But tell me this—is that the reason why John Corkery hates you and Atkins and Parran? He cursed you for a murderer when he left the *Hind* at Gloucester and we thought it was because he laid the death of his brother to you. It wasn't only that. What was it?"

At mention of Corkery, Roades became savage again. He shut off the quick blaze as soon as he could, but before he could get hold of himself, his hand flashed to his belt and his shaky fingers flicked against the ivory hilt that lay there. This dirty habit of keeping a killing knife so handy, a trick he had picked up in the French cod fleet years before, had always distressed Nora. A hot impulse almost drove her to break him out of the captivity then and there. Yet she remembered, in time, the Lisbon's warning: "Keep an eye on him!"

She shivered in a new revulsion and left him there.

ON deck she found Hardeggon and the watch anxiously gazing into the west. The *Golden Hind* was jogging back and forth across the Middle Ground. The month had taken a bite out of the moon, yet it shone with such force that she had difficulty, at first, in making out the mark-buoy. It was one star of many shining low on a jagged horizon. She joined them at the weather rail and asked what was up.

The watch replied, "It's that *Doubloon*. Parran's out there, dragging over our fish. Couldn't find them for himself."

Hardeggon said, "Now I make him out. No, he's not dragging. He's just nosing around." He lifted his hand.

Nora saw a star blocked out by a shape beyond. A moment later, the mark-buoy vanished.

Hardeggon said, "He drags at three knots. He's making eight or nine now. What's he up to? He makes me nervous."

Nora watched the *Doubloon* move on. Its port light twinkled and faded in the vapor.

The watch said, "You're right, Dan. He's going on. There! He's coming around."

The red light gleamed, then the hull went dark. Soon the green light shone.

They kept watch for an hour or so. Just before they turned in, a war vessel went by to the eastward. The watch changed again and Nora and Hardeggon went below. They slept several hours.

Toward dawn, Nora was awakened by the *Hind's* horn baying. The fog had thickened and the watch was cranking the horn to keep off passing vessels. The sun scoffed up the vapor for a while and the dories were dropped off after breakfast to make a set. All had gone well during the night. The mark-buoy had served well, so that the *Hind* now fished where she had such good luck the day before.

Because of the danger that the fog might close in again and cut some of the dories off, the men were picked up after the set, so that they could spend the waiting-time in the safety of the vessel. She kept sailing up and down the line of buoys, now and then letting out a blast of her horn.

They ate dinner two hours before noon and twice during the meal their fog signals were answered by passing vessels. The second gang had just fin-



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ished dinner when a horn yelped at them close at hand. It was the *Doubloon*. She fooled around beyond the hedge a bit, as if she weren't quite sure of herself; then she came right up. Her bow watch hailed the *Hind*. The dragger slowed down and stood vaguely seen in the mist.

A flurry of snow rolled over her house and darkened up the *Hind*. Hardegon had the helm. When he answered the hail, they heard some loud talk on the *Doubloon*. Her engine idled and she came closer.

Parran himself hailed the *Hind*. "That the *Golden Hind* there?"

"Aye, 'tis she!" Hardegon growled over the spokes. He said to a doryman, "Tell the captain the *Doubloon* is talking to us."

Roades came on deck. He cried out, "You the *Doubloon*?"

"Right you are the first time!" They could hear Parran's boisterous laughter. "How you making out, Captain?"

Roades gave him the customary wary answer that there wasn't a fish to be had for love or money. "Killed a few here yesterday and marked them."

The wind and sun suddenly cleared that space. They could now see Parran filling up the door of his pilot-house, his black eyes gleaming in the black bristle of his face. He wore a sea-blue cap. He bellowed, "That your mark-buoy I saw last night, Captain?"

"Aye, 'twas ours! We've made a set here just now. Mind you don't drag over our trawls."

"What an idea!" Parran laughed again. "I'll clear out." He laughed once more, this time a mirthless laughter. "You still got your company aboard, Captain?"

"I have."

"You'll want the news then. Market cod is sixteen cents. Large is eighteen. Nothing much coming into Boston. Red-fish at Gloucester, as usual. Three hundred thousand pounds yesterday. So the Gloucester station says." He waved and closed the door. The *Doubloon's* engine started to speed up. The dragger steered westward and vanished into a new spread of vapor. Her horn began wailing.

That same wall of vapor now rolled over the *Hind*. This time it was so thick that a double watch was set in the bow. Fresh flurries of snow came up; the sea began kicking the *Hind*. Such conditions were always hard to bear. The news of fair prices at Boston didn't make waiting any easier. The Lisbon kept his temper, as usual, and made light of the choppy sea.

"It won't come to anything," he said.

Just the same, he kept a sharp watch for the trawl buoys. When one rolled by, he brightened up considerably and said a cheerful word about it.

This particular action, common and useful though it was, began to get on Roades' nerves. He had been hard hit by Nora's talk. He really wasn't fit to live with; which wasn't to be wondered at in view of the things he had lost. At last, he shouted at the Lisbon, "What in hell you fidgeting around for? Don't you think I know where my trawls are lying?"

He didn't wait for an answer. He went below and stayed there, after leaving word that he should be called if the weather cleared.

The Lisbon stared after him. He made

no reply, of course. He didn't have enough respect for Roades to enter into kindly talk with him. None of Roades' words or actions escaped him; nor did he fail to catch their subtler meanings. One thing could be said of the Lisbon—he never missed a trick. There were men aboard the vessel who could be misled by a lie or a gesture, but nobody could fool the Lisbon. A falter in a sentence, or an eye turned away too soon, was enough to sharpen him. His earnest affection for Nora made him even keener now.

He made it clear that he had snuffed up a taint. He said to nobody in particular, "Me—I would put dories over now and haul. That's what I'd do!" He spoke loud enough so that all the men—and there were twenty on deck—could hear him.

THEIR very presence at such a time of day indicated that their rebellious mood hadn't really waned. Parran's talk had dulled their cheerfulness. His laughter was a gaff to them.

Nora understood why they had gathered near the helm, crowding the quarter. In a way, they were helpless; because they actually didn't know where their trawls were lying. At least, not precisely. Had the day been blue, they might have acted on their own. In such thick weather, the captain was the only man who would have exact knowledge of the buoys' whereabouts. It was his part to keep that account in his mind, to add up the miles of jogging, to subtract the turns and returns along the line of buoys. Roades was the man who should be standing there, ready to thrust an arm into that rolling mist and say, "Number One dory is here!" Other men were expected to take a kink at such idle times in order to store up strength for the labor of hauling. Even Hardegon, although he was acting as first officer, couldn't be expected to watch the sailing so closely.

These were circumstances that Nora had never heard of before, despite all her experience and all the talk she had taken in. She was baffled. The shock of her quarrel with Roades had slowed up her thinking. She could only keep her silence and watch them stamp up and down to keep off the chill. Often she saw them put their shaggy heads together and exchange words that brought new looks of wonderment and anger.

At last, in her desperate need to say something, she asked Hardegon, "Has it cleared at all?"

"No!"

At this, old Clem turned from the rail where he had been peering into the obscure flow. He said, "It'll grow no worse. We can haul all right. We've hauled in worse than this. And him, too. He's drowned men—he has—in a sea worse than this!" He faced Hardegon and angrily asked, "You know where them buoys are lying?"

Hardegon, not liking the taste of munting, hesitated.

Nora saw him falter. She repeated the question. "Do you know, Dan?"

Hardegon thrust out his arm. "Number Four lies there!"

All their heads changed to follow the direction. Somebody said, "That's what I reckoned, Jack." Another, "That's about it, Clem. Four or Five's there."

(To be continued)



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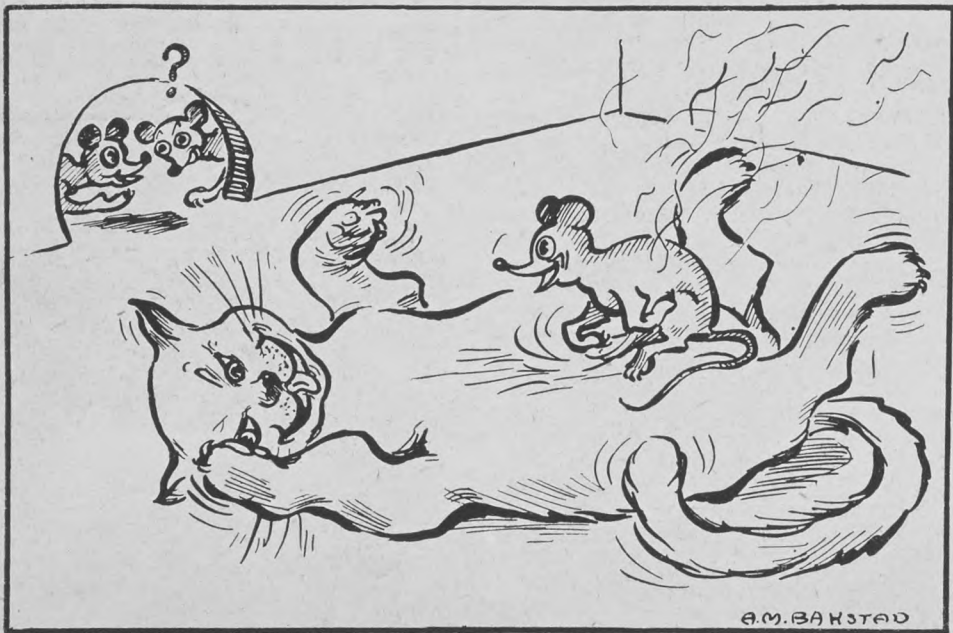
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The Royal Bank of Canada Annual Meeting

Morris W. Wilson, President, sees no quick and easy solution to reconversion problem. Believes greatest half century in Canada's history just ahead.

Solid confidence in Canada's future and the prediction that the greatest half century in the history of the Dominion lies just ahead, were voiced by Morris W. Wilson, President of The Royal Bank of Canada, at the bank's Annual Meeting.

The reconversion period for which so many plans had been made was no longer a prospect, said Mr. Wilson. "Now we are in it. The problem is no longer speculative, but is gradually being met in a practical manner, more or less satisfactorily. If one or more sections of the masterpiece we desire to produce are not filled in at once, let us not worry too much, but look at the whole picture and its good prospects. Many of our people, not realizing the nature of the real problems in reconversion and reconstruction, want a quick answer to all questions, and an immediate completion of all plans. There cannot be such an easy way: changes in nature, people, and life are continuous, not abrupt."

READY TO MOVE FORWARD

Solid ground for optimism, said Mr. Wilson, was to be found in the remarkable record of accomplishment in Canada during the past 45 years. "Some interruptions have occurred," he said, "but now we are ready again to move forward." Mr. Wilson pointed out that while Canada's population since 1900 had increased by only 123 per cent, the number of acres occupied for farm purposes increased 176 per cent; the value of farm property had increased 251 per cent; the value of agricultural products exported 300 per cent and the number of bushels of wheat produced 685 per cent. The increase in mineral production had been, copper 2079 per cent; gold 114 per cent; lead 377 per cent; nickel 3781 per cent; silver 204 per cent; asbestos 1115 per cent. The output of wood pulp had increased 1892 per cent. Radios, automobiles and airplanes, had not even been predicted in the 1900 statistical books.

"And now, what should we do to make sure the progress of the past half century is continued and expanded in the next 50 years? I have no doubt that we have made mistakes and will continue to make mistakes in preparation for and conduct of our economic plans, but if we look ahead carefully, make our plans as prudent individuals, corporations and as a nation, and carry them out energetically, I am very sure the greatest half century in Canada's history lies just ahead. Canada's people do not need to be fearful of the future just because they cannot pull out of a pigeon holes the complete answer to every question posed."

FOREIGN MARKETS

The vital importance of foreign mar-

kets to Canada's future welfare was stressed by Mr. Wilson, and he questioned whether Canada was making the most of her trade possibilities with South America. Indicative of the extent of the South American market was the fact that imports by all South American republics in 1940 was one billion, 11½ million dollars. "It is interesting to note," said Mr. Wilson, "that many commodities required by these countries are products of Canada, including iron and steel, chemicals, paper, wood and manufactures of wood, vehicles, paints, wheat and other foodstuffs, mining and industrial machinery, electrical apparatus and many minerals. There is still a wide field which Canada may cultivate."

"If we admit that prosperity in Canada is not just local, then the next step is to consider how we can help ourselves by measures designed to raise the purchasing power of other countries so that they can buy our goods."

"The International Monetary Fund and the International Bank of Reconstruction set up under the Bretton Woods agreement are evidence of a good spirit. I believe we have done well so far in making these arrangements; they present an outward and visible sign that nations are conscious of the world outside themselves."

CANADA'S OPPORTUNITY

"Our geographical position makes us the link connecting the two great industrialized countries, Great Britain and the United States; our membership in the commonwealth of free peoples gives us a world position much higher than would be warranted if we stood alone; our great industrial technical skill helps us meet the requirements of any market; our rich store of natural resources assures supplies of raw materials indefinitely; and our historical capacity for tolerance wins for us respectful attention in the councils of the nations."

"Yet, some people persist in saying: 'Times are going to be hard.' This is no occasion for thoughts of failure."

"I refuse to believe that after so long-continued slow but sure progress mankind will allow itself to be annihilated by atomic bombs, or to be enfeebled by long drawn out decay, or paralyzed by disputes which ruin international trade and co-operation. This country should have no doubt of itself or of the contribution it can make to the world. All we need is faith in Canada and confidence in our own enterprise and energy to make the second half of this century greater and more abundant than the first which was, in a material sense, as I have shown, great indeed."

EIRE LOOKS FORWARD

Continued from page 5

after strenuous effort the aggregate export trade from Eire to countries other than Britain increased from six per cent of the total trade in 1929 to only 7.2 per cent in 1936, an effective answer to the question of interdependence.

Dublin also tried to compensate for the loss of the unrestricted cattle market during the trade war by compelling farmers to cultivate a portion of their land and paying a bonus on wheat which it was hoped would be raised on the newly cultivated fields. When the bonus was first granted Eire was growing less than ten per cent of the wheat she ate. By its encouragement wheat production was raised to about half domestic requirements when the Great Powers went to war.

But there were anxious days in Dublin. Neutral Eire was dependent on the merchant navies of the allies to bring her the remaining half of her daily bread. If someone had to go short it might be Eire. So compulsory tillage was increased to 37½ per cent of all farms over ten acres in extent, and the guaranteed price for wheat was repeatedly raised till it now stands at 55 shillings a barrel of ten stone—\$2.60 a bushel to you. Dublin aimed at encouragement sufficient to induce her farmers to grow 650,000 acres of wheat, which should make Eire self-supporting in flour, an aim which was nearly reached with the additional aid of 100 per cent flour extraction.

Government Controls

The postwar visitor from severely rationed England is pleasantly surprised at the apparently unlimited supply of sugar on hotel tables. And thereby hangs a tale of thorough-going and effective state control. The government has fostered the erection of four sugar factories with a combined capacity nearly large enough to meet the country's requirements, and still retains the controlling interest in their management. The entire output is sold through a central organization which has been given a monopoly of the domestic market. Any importation of sugar that may be required to fill the bill is done under license, and the imported sugar distributed by the central body. It is an air tight plan for forcing the consumer to support the industry on a level deemed adequate by the government. More about this later.

The trade war came to an end in 1938. Britain surrendered the treaty ports and removed the duties on Irish imports. Eire agreed to pay a lump sum to wipe out unpaid annuity claims and reduced the tariff on British goods. The shooting war began before the farmers of Eire had recovered from the trade war with England. Some of the increase in Irish farm production since 1939 is merely taking up the slack lost in the trade war. In any case it is not the impressive increase registered in Britain and Canada. Even today in a grazing country next door to a land starved for lack of deep sea refrigerator shipping, Ireland isn't yet self-supporting in some agricultural products, notably butter. In all fairness one must add that the war shut off the customary importations of margarine and part of the increased butter production has been used to fill this void. Also, while Ireland is not in the United Nations Relief organization, she has shipped butter and other food to France, to Belgium and to the Pope for distribution in Italy.

There is another clue, however, in this relative failure to boost wartime butter production to export volume. The Irish suggest that it is not a profitable business. The British Ministry of Food has been asked to pay a higher price for Irish butter on account of higher Irish production costs. To date Whitehall has not been moved by this appeal.

I expressed some surprise that the store cattle trade, admittedly one which responds slowly to the stimulus of demand, did not show greater strength. It was explained to me that by price discrimination the British had cut re-



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turns below an economic level. The British tell the story slightly differently. Whitehall, as is its perfect right, pays a bonus on all home bred beeves. Consequently the British feeder pays more for store cattle if they are home bred. The Irishman merely fails to collect the British bonus. No other discrimination has been shown.

As to the future of agriculture in general, Irishmen of all opinions agree that their basic troubles are high unit costs, arising out of low yields, and lack of technical proficiency. The two outstanding needs in Eire are restoration of soil fertility and broadly based agricultural education.

Irish farmers are convinced that they must take a leaf from the Englishman's book. The great discovery, or rediscovery, by English farmers during the war has been the benefit to be obtained from "ley" farming. By short leys, that is three or four tilled crops alternated with an equal number of years in grass, the Englishman has found that he can grow not only tilled crops which have been profitable under wartime conditions, but better grass and more of it. England has cut her grass acreage 40 per cent and increased her milk production at the same time. Irishmen of all opinions agree that for them too this is the key to a revival of husbandry.

Ley Farming

Part of the success from ley farming rests in the greater ease and effectiveness of fertilizing. The Irish farmer is going to fertilize his fields from now on, if propaganda and financial assistance can ensure it. Various plans of assistance are being mooted. Maybe it will be to pay rail freights on the stuff to equalize costs all over the country, thereby encouraging farmers in remote and backward areas. Maybe it will be a straight subsidy. Coupled with it there will probably be established a soil survey and a soil analysis service.

Ley farming will correct another evil. The weak spot in Ireland's cattle business is the universal tendency to leave stock out of doors in the open winter to maintain itself on depreciated pastures. Irish beeves go steadily down in flesh throughout the winter because grass farms do not produce the necessary supplements. Ley farming will provide coarse grains, straw, and turnips, the combination out of which Scotsmen built their lucrative animal industry.

In their search for profitable tilled crops the Irish will pay more attention to the potato. It is particularly adapted to the climate and escapes the risks of wet harvest weather. The national average yield during war years has been 300 bushels per acre. Ireland is giving first place to the establishment of industries founded on local agriculture. The production of commercial starch and industrial alcohol from potatoes cries out for exploitation. Following a German lead, disease-free, high-starch varieties can be developed. An Irish potato breeding station has already been advocated.

The Irishman also uses potatoes for bacon production, employing skimmed milk if he has it to balance the diet. While Eire has a big cow population, skimmed milk is not so freely available as in Denmark. The Dane veals his calves in order to have milk for bacon production. Eire places the emphasis on its mature cattle trade, so consequently the milk is largely used for growing calves. Lacking skimmed milk the Irishman can use fish meal or meat meal to balance a potato ration.

In Eire they are commencing to make potato silage. The spuds are washed, boiled, pulped and stored anywhere above ground. Spoilage is much less than in corn and the silage, when fed, produces a hard white bacon fat. The only brake on faster adoption of potato silage is the limited amount of machinery in the country to process the spuds. Portable machines which do a custom job, as threshers do in Canada, are making their appearance, but slowly.

The Canadian who goes to the land of Sir Horace Plunkett expects to find agricultural co-operation a driving force. Regretfully one must say it is only holding its own. Plunkett came from the Anglo-Irish element and his movement suffered thereby. After his own house was burned about his ears he left the country in disappointment. His like has

not been found. Agricultural co-operation in Eire has not advanced beyond local units with strictly limited aims, usually a creamery, often engaged in side lines such as grinding grain, collecting eggs, retailing fertilizer or other commodities. The dominant note in Danish agricultural activity is absent. It may be true that centuries of foreign control have made the Irishman less sensitive to his civic responsibilities, less anxious to "stick his own neck out."

A majority of farm leaders in Ireland believes that a great national effort to develop the productiveness of agriculture along the lines set forth in the foregoing will enable Irish farmers to compete in world markets and at the same time provide a higher standard of living for their families. Most of them have faith that research, co-operation and a moderate amount of initial assistance will do for Eire what it has done for Denmark and New Zealand, another grass country living on the British market.

Others dissent sharply. It is not enough, so runs their argument, to insist on efficiency. There is no use preaching ley farming unless you do something to make the crops produced under that system profitable. The guaranteed price for wheat must be kept high enough to ensure 400,000 acres sown to that crop. Sugar prices must be kept high enough to ensure the use of 60,000 acres for beets. Government control of sugar has been so successful, say these preachers of self-sufficiency, that it ought to be extended. The Irish consumer should be made to support the agriculture of Eire. Its government should pay bonuses and set up control organizations for all commodities wherever that course is practicable. Encourage expansion in all lines up to the limit of domestic consumption at least.

Take the case of butter. The protectionists say that under competitive trade conditions New Zealand butter has driven the price so low at times that Irish farmers have had to accept as little as 4d a gallon for milk, a ruinous price. Their answer is to rope off the home market for their own producers and pay subsidies that will encourage production up to full domestic requirements. They would go further. Tax margarine, prohibit tinting, and its admixture with butter. A harsh policy in a country where one sees bare footed children on frosty city pavements at Christmas time!

Proposed Policies

Similarly with bacon. The farm protectionists suggest pooling domestic and export sales and fixing a price high enough to maintain production, fixing it in advance, moreover, so that a pig breeder may plan his production.

I suspect that this school of thought isn't going to have the last word, however. Complaints are being heard from consumers that these protective policies are raising the cost of living. Statistics show that it went down steadily from the time of the establishment of the Free State until the commencement of the self-sufficiency program and has gone up steadily ever since. That is not too reliable a measure because the low point corresponds with the great depression, and the increase since 1939 is due to advancing world prices consequent upon the war.

But farmers are themselves complaining. The pig and cattle feeders object to the prospect of paying duty on imported grains in order to make tillage on some other farm profitable, and part of the hand-out to the beet and wheat growers comes out of the pockets of these who don't happen to grow those crops.

Indeed there is a good deal of sturdy optimism in Eire which says that protection of agriculture in a country which lives by its farm exports is wrong in principle and unnecessary. The bacon business, for instance can stand on its own feet. At the Albert Agricultural College near Dublin I was assured that the Irish pig, a straight York, is the best bacon pig in the world, not excepting the famous Landrace. The national average of pigs weaned per litter is 8.5, a figure unequalled in any other country. The climate is mild and pig breeders are free from the trouble experienced in Canada and the Baltic states with winter farrowing. Because pig raising is a small farm business disease losses are in-

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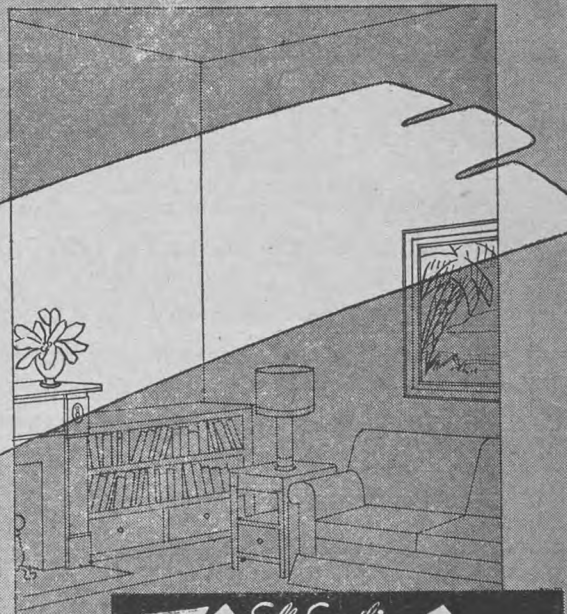
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significant. Irish pig growers can probably stand up and take knock for knock with any competitor.

Likewise the farm hen can play an important part in agricultural reconstruction in Eire. One sees the same mistakes with Irish flocks that are the rule in Canada, the farm men leaving it to the women folk, bad housing, chicks hatched late, and the bulk of the eggs marketed between February and August. With all these drawbacks the poultry business is a good third in Eire, second only to the live cattle and dairy products, and nearly twice as valuable as the highly subsidized wheat crop.

There is some ground for optimism on this score. Only eight per cent of Britain's eggs normally come from Eire. It will be more in the years ahead according to Dublin. The Irish have an admirable system of grading and inspection. Their hens average only 110 eggs yearly but her leaders think production can be raised to 140 with reasonable effort. Whereas they have depended largely on imported grain hitherto, it is now known that 40 per cent of a hen's diet can be made up of cheap potato silage. The baby chick business is only beginning to come into its own.

With such a well supported sugar industry, one would anticipate that Eire would establish fruit canning factories. Canadians are surprised, however, to find how ill adapted the country is for tree fruit, chiefly on account of lack of sun and heat, but also because of damaging late spring frosts. A frost on April 30 ruined the apple crop last year and Dublin was without any this winter. The hottest months of the year have a mean temperature ranging from 60 to 65 degrees depending upon locality. There isn't enough sun in the country to grow pears. Peaches, for all their equable winter, will only grow against a south wall. Irish orchardists complain that B.C. has corrupted Dublin's taste for apples. Some of the best eating native varieties are uncolored. The Irish public now scorn them. If they can't have McIntosh Reds from overseas they will take red Irish apples of inferior quality.

As in all the older countries, farms in Eire have been so sub-divided that many are too small to be economical. One third of them are less than 15 acres in extent, and only one quarter are over 50 acres. Men and women from the small holdings have to supplement the farm income by money wages. Ireland is still exporting men, but the exodus is only a trickle of what it once was, the locals hasten to tell you.

But there is another factor in that equation. The birth rate is down; for many years the marriage rate has been far lower than in northern Ireland, and only about half the rate in England and Wales; and the marriage age is so late as to be a matter of public concern. Only one-third of the women between the ages of 15 and 44 were married at the taking of the last census in 1941. Small farms—small incomes—fewer marriages. Economic causes appear to be inexorably shaping family life in Eire, regardless of influences to the contrary. Few Irishmen are migrating because there are fewer to migrate.

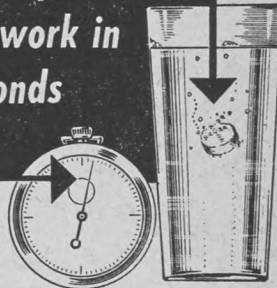
No Irishman will thank me for suggesting it, but the choice before Ireland in this century is not unlike that confronting the Scots in Stuart times. The Scots surrendered a measure of their political autonomy in order to come in under England's economic umbrella, with what success everyone knows. The southern Irish, as was their perfect right, stepped out into the rain in order to regain their unfettered political sovereignty. It may rain heavily for the next little while but the Irish are confident that the skies will lift, and some day they will have an umbrella of their own. The technical problems facing agriculture, her predominant activity, are not insurmountable. If the tricky dice she is now about to cast come up showing profitable markets, Eire will win another round in the founding of a nation.



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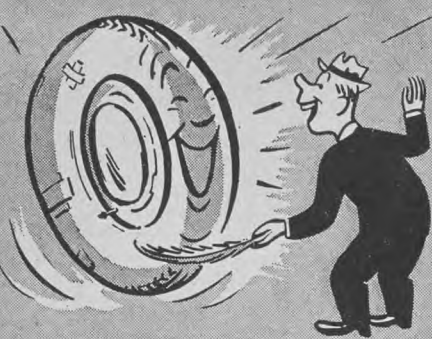
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The Ageless Game

For 400 years curling has been the national game of Scotland. In Canada it rivals hockey in popularity

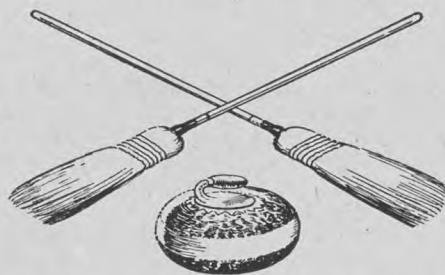
By W. S. BEATON

CURLING is an ancient and honorable game—and in Scotland—its birthplace, it has been a national pastime for close upon 400 years.

As a matter of record and fact, when a pond was drained, in Dunblane, Perthshire, Scotland, about 60 years ago, a curling stone was found with handles attached, on which was carved the year—1551.

Somewhere between the years 1520 and 1550 when lawn bowling was the national summer sport in Scotland, some individual there, of whose name there is no record, apparently conceived the idea of curling, a game of lawn bowling on ice.

The earliest curling stones were natural boulders termed "loofies" taken from dykes, etc. They had no handles, but had holes cut in them for finger and



thumb. This was later changed, by having an iron handle run in, sealed with lead, which enormously increased the weight of the stone or boulder, some running well over 100 pounds.

The stones were all shapes and sizes, but after the institution of The Royal Caledonia Curling Club, the maximum weight of stone, including handle and bolt, was fixed at 50 pounds, and was reduced to 44 pounds in 1896.

The oldest curling club in the world in present existence, is the Dudingstone Curling Society, organized in Edinburgh, January 17, 1795. This club played according to its own particular rules from 1795 to 1834 when there was formed "The Amateur Curling Club of Scotland." The new organization decided there should be a standardization of the rules, and went into convention with The Dudingstone, and other outstanding clubs of that period.

Curling as a regulated sport with uniform rules dates from that time. But, "The Amateur Curling Club of Scotland" ceased to function as it merged with The Grand Caledonia Club, on November 15, 1838, which club became the ruling body for curling throughout the world. History indicates Queen Victoria attended a curling match in 1842, and praised the game so highly that officials and members of the Grand Caledonia Curling Club changed the name to Royal Caledonia Curling Club—by which it has since been known.

At the time of its founding The Caledonia had a pioneer membership of 28 clubs, which has greatly increased, and its roll now contains the names of more than 1,000 affiliated clubs.

As Scottish regiments were among the first to garrison the major Canadian forts or posts, history shows they introduced curling to Canada. There is no official record of the exact date, other than news stories, to the effect curling matches took place between rinks of the Scottish Regiments around the town of Halifax, Nova Scotia and Quebec, in Quebec about the start of the year 1800.

Actual records show the "Montreal Curling Club" was founded in 1807, and the first inter-city match was played in 1835, between teams representing Montreal and Quebec. This game was staged at Three Rivers, Quebec, which was a mid-way point between the two large towns. There were no railroads at that time. This meant the curlers had to drive their sleds—a round trip—of more than 200 miles in deep winter. Quebec won, and the Montrealers had to buy the dinner.

Curling was introduced in the United States in 1820, and for more than 70 years, progressed more rapidly in the United States than in Canada. The first U.S.A. Club was "Orchard Lakes" of



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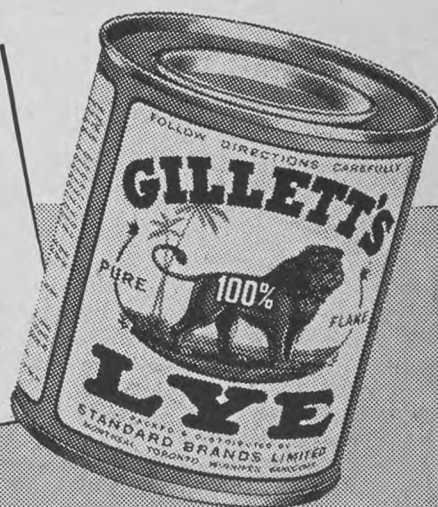
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CANADIAN VON CO.

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Windsor, Ont.



RUBBER HEELS & SOLES

THE WARTIME PRICES AND TRADE BOARD FARMERS' BULLETIN

TO IMPORT U.S. BEANS

To supplement Canadian supplies of dried white beans and to satisfy demand, it has been found necessary to import lima and kidney beans from the United States. By an order effective January 9 last, price ceilings for these beans have been fixed on a basis of U.S. ceilings, plus transportation costs, plus the usual mark-up usually allowed to the trade.

SPECIAL CHEESE PRICES

Commencing December 15 last, makers of coloured Cheddar cheese were permitted to charge an additional one-sixteenth of a cent per pound to cover the increase in production costs over the cost for making white cheese. Also, price increases were allowed for the manufacture of special sizes, viz.: $\frac{3}{4}$ of a cent per pound for "Daisies" from 20 to 22 pounds, and $1\frac{1}{8}$ cents per pound for "Stilton" and "Oblong" blocks of 10 to 12 pounds.

SPANISH ONION PRICE CHANGE

The one and one-half cent increase previously allowed on sales of Spanish onions (three inches) has been eliminated for the period of January 1st to August 31st of this year. Canadian producers of Spanish onions will not be affected by the change, owing to the lateness of the marketing of their product, but this Spring's importations will have to be sold at the same price as Canada No. 1 cooking onions. Below is the price schedule for farmer or shipper now effective for all grades of Spanish type onions with a minimum diameter of three inches. (Cents per pound).

				May 1 to	July 1 to	July 16 to	Sept., Oct. and		
Jan.	Feb.	March	April	June 30	July 15	Aug. 31	Nov.	Dec.	
3.65	3.80	4.00	4.25	4.25	3.75	3.50	5.00	5.05	

WEIGHT REDUCTION FOR RED LABEL BEEF

As of January 2, 1946, the minimum weight required for beef carcasses, graded in accordance with specifications prescribed for Choice Beef (Red Brand) as set forth in the Livestock and Livestock Products Act, 1939, will be 300 pounds instead of the 375 pounds as previously required.

PRIMARY PRODUCER COUPON COLLECTION

1. If You Produce Dairy Butter

You may consume in your own household all the home-made butter you wish but you must collect from the ration books and ration cards of members of your household valid butter coupons at the rate of two coupons for each pound of butter used (except that you need not collect more than the total number of butter ration coupons valid in such ration books and ration cards during the month covered by your report). If you sell your dairy butter you must collect valid butter coupons or other valid butter ration documents at the rate of 2 coupons for each pound sold.

2. If You Slaughter Your Own Livestock

Farm slaughterers must collect meat coupons for all meat consumed on their own premises at the rate of one meat coupon for every 4 lbs. of meat. They are not required to collect more than 50% of the valid meat coupons in the ration books of their household.

If you are a member of a beef ring or if you slaughter and sell to other farmers or if you slaughter for other farmers, consult your Local Ration Board.

3. If You Produce Honey or Preserves

You may consume in your own household all the honey or preserves that you wish without collecting coupons from the ration books or ration cards of your own household.

However, if you sell honey you must collect valid coupons or other valid ration documents on the basis of one sugar coupon for each 4 pounds of extracted honey or cut comb honey sold. (Comb honey in standard wooden sections is not rationed). Or if you sell preserves, as follows:

- 1 sugar coupon for each 40 fluid ounces canned fruit sold.
- 1 sugar coupon for each 24 fluid ounces jam or jelly sold.

4. Coupon Settlement

All ration coupons and other ration documents collected by farmers or other primary producers from other persons, together with coupons collected from the ration books of the farmer's household for products consumed on the premises, must be forwarded to the Local Ration Board monthly in RB-61 envelopes provided for that purpose.

FARMERS' RATION COUPONS

		Butter	Meat	Sugar-Preserves
February	7.....	139	23	—
"	14.....	R-1	24	—
"	21.....	R-2	25	70 and S-1
"	28.....	—	26	—

NOTE:—As in the winter months of past years, the butter ration has been reduced for the months of low production. Beginning January 1, a reduction from 7 to 6 ounces became effective.

For further details of any of the above orders apply to the nearest office of the Wartime Prices and Trade Board.

46-1

Pontiac, Michigan, and this club was the nucleus of other curling organizations along the Canadian border; with Canada, rather slow to take up curling as a major winter sport.

Scotland, when considering International competition, challenged the U.S.A. in the winter of 1902-03, which resulted in the first International curling match in that year.

Since then, the situation has changed, as while the sport continued popular in Utica, N.Y., and cities close to the Canadian border, it has boomed in Canada. Canada abounds with curling clubs. There are teams of youngsters, teams of middle-age, teams of oldsters, and teams of women from Nova Scotia to British Columbia. In some places it challenges hockey in popularity, for whereas, hockey is the game of youth, curling is ageless.

FAIRIES OF THE SPRUCE WOODS

Continued from page 38

trees, and in my opinion flying squirrels also have well defined if unmarked thoroughfares among the lofty branches and across clearings of the spruce forest. Time and again I've seen them soar out from the top of a certain tree, landing across the clearing on the trunk of another tree favored over its neighbors for their use. I believe that each squirrel has its range and territory rights, too, though in the case of flying squirrels these ranges appear to be larger in area than the narrow confines of the red squirrels. When one sees a fight between flying squirrels at a time when mating is not in season, the reason for the fight probably has something to do with property rights and trespassing.

Flying squirrel homes are usually deserted woodpecker holes in a stump, and if a person goes wandering through a spruce wood and raps sharply on the old balm or poplar stumps riddled with the holes of that bird carpenter, the Flicker, he'll often see the head of a flying squirrel pop out of an opening to find out what's causing the disturbance. That's how I chanced to find my first nest of baby flying squirrels, and the stump was only six feet high and the hole was well below eye level and thus permitted me to study the family at close range.

There were five baby squirrels in that family, blind and helpless when I first found the den and lovingly tended by the mother animal. Every evening at late dusk she would rouse herself from sleep, climb out the hole and jump across to a nearby spruce tree, then run up to the top of the spruce and glide away into the wide forest in quest of food. Their main food here in the west is the same as that of the red squirrels, the seed kernels found within the leaves of spruce cones. Birds' eggs and fledglings, berries in season, fat beetles and grubs, mushrooms, and any kind of wild nut all attract their hungry interest. They'll eat a little grain if they chance to find a stook or granary handy to the spruce woods, and I once saw a flying squirrel fling itself down on top of a field mouse and kill and eat it.

But to return to this nest of young flying squirrels. At first the mother was nursing the baby squirrels, but soon she began to bring back articles of food from the night woods. It was hard to tell exactly what she carried in her mouth, for it was difficult to see in the moonlight, but I rather suspect that she first fetched soft berries and perhaps soft insects for the youngsters to eat, and later on she brought many a spruce cone and shucked out the seeds for them. Before long the young ones climbed out of the hole and crawled on to a nearby branch and poised there, five fluffy little balls of fur all nervously watching the great, quiet night woods. Shortly after, they scampered all over the stump and jumped from it to the nearby spruce tree. Their gliding was instinctive, and they knew by instinct how to slow the speed of the downward swoop by swerving upwards at the end

of the flight. The little ones rapidly became independent, coming and going at will. At that stage the mother began to lose interest in her family and went about her own affairs. They appeared to retain a family interest in the nest hole for a while, mother and young sharing it for sleeping purposes during the day. Then came the time when the mother no longer returned to the nest, and only four of the little squirrels came back to its familiar refuge. Probably an owl accounted for the absence of the missing youngster, for the Great Horned Owls often catch these night squirrels.

By July the young squirrels were nearly full grown, and one evening when I went to the old stump to watch them the nest hole was completely deserted and I never saw any of the family go back to it.

Flying squirrels are beautiful animals, the fur a soft grey-brown on the upper parts of the body and a cleanly white underneath. The Alpine flying squirrels of the northwest are fairly large members of the family, totalling eleven inches long with the tail about half that measurement. In eastern Canada there are two smaller varieties, the Eastern flying squirrel and the Northern flying squirrel, while in the west we get the Northern flying squirrel, the Alpines along the foothills and mountain country, and probably the large Olympic flying squirrel in the southern coastal woods of British Columbia.

Flying squirrels have the loveliest eyes of any wild animal. They are extra large in size and luminously soft and lovely to see. Some authorities claim that flying squirrels have no vocals of any sort, but that's all wrong. I have heard them uttering their silken little whistles again and again, and in the springtime they produce a high pitched trilling that is very distinctive but rather difficult for the human ear to hear at any distance.

During the nights of July, when the moon is full, it is a fascinating experience to watch family groups of young flying squirrels come and go through the rose-smelling night woods. Sometimes they adopt a follow-the-leader course, taking off from a particular tree top one after another and flashing downward across a clearing, landing on a swaying branch or against a tree trunk, whistling softly back and forth as they chase one another through the enchanted forest.

There's something very appealing about these little squirrels that come out after sundown, with their silent, graceful glides through space, their rustling pathways up the dark spruces, and their gentle whistlings. Canada is a beautiful land but a very practical one with no time for the fabled little folk of the Old World, but some of us see, in the flying squirrels, Canada's fairy folk of the night woods.








"Gran'ma sez you usta get whaled sumpin' awful in this ol' shed—how can you live over them painful moments, pop?"

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A STITCH IN TIME

Continued from page 7

gan's face as he read the letter, but the resort owner's face betrayed nothing. It masked every emotion. He looked up and said, "Well, Jud, your dad's asked me to line up a job for you. I guess it can be arranged. I still swing enough votes around here to ask anything within reason."

"Dad's a fine man," Jud said, "he's been against me being a sheriff on account of my size. He's tried to block me at every turn, but when he saw my heart was set on working into his old job he said I might just as well give it a whirl. And here I am."

"I'll speak to Sheriff Slade as soon as he gets in," Terry answered.

Jud felt his heart leap with excitement. "That's fine," he declared, "and—say, I grabbed a chance up the road to pick up a little evidence on the road agent murder business. Give me time and I've hopes of finding the man."

HE thought he saw an odd expression come into Terry's eyes, but he wasn't sure. For a moment he wondered if, perhaps, Terry didn't want the road agent arrested with resulting glory to himself. But it was only for a moment. Jud hated himself for the surge of suspicion in his breast. His father had vouched for Terry and that was sufficient.

Early the following morning Terry Mulligan dropped in at Jud's hotel. "Sheriff brought in a couple of rustlers last night," he said. "He was pretty tired so I didn't bother him. We'll go over now and talk about it."

Terry led the way into the sheriff's office. "Meet up with Jud Tait, old Buck's son," he said.

Jud's hand came out first. The sheriff scowled, hesitated, then shook hands. He was a rawboned man, with leathery face, a thin, high-bridged nose and eyes set too close together. Jud decided he was the type that sucked his finger and whined when he was a child. He wore a faded blue flannel shirt on which was pinned a sagging star. His overalls were badly worn and his attitude, generally, that of a man who spent much time in the saddle.

"How's yore pa?" the sheriff asked. "Before he resigned and went to the coast to live them old bullet wounds hurt him off and on."

"He's first rate," Jud answered. "The wounds bother him once in awhile, but not like they used to."

"Jud's looking for a deputy's job," Terry said. "What can you do for him?"

"Can't do a thing," the sheriff answered shortly. "My budget's so low now I have to do lots of work I'd give a deputy to do if I could afford it. I'm on the go day and night it seems like."

"How about a special deputy's job?" Jud suggested. "I'd be on call, here, but only paid when you need me."

"I'm afraid that wouldn't work," the sheriff said.

"Come on into your private office," Terry said, "and let's see if we can't fix something up." He closed the door and the two of them were alone. "We're both in wrong these days, Slade," Terry continued. "My saloon's supposed to be the hangout of drygulchers, just because customers went from the bar to their deaths. You're in wrong because you don't go out of your way to make yourself popular, and because you haven't brought in the Phantom Road Agent."

"The damned cuss strikes when my back's turned," Slade argued. "He knows so much about my business that he might almost be you."

"Or even you," Terry added, "when it comes to that. You can make a bit if you'll give the kid a job. Folks will say, 'Slade's a pretty good fellow after all. He's give old Buck's son a job. Maybe we've had him sized up wrong!'"

"I hate the Tait's, but that's an idear," the sheriff conceded.

"You can keep him here, under your eye," Terry argued, "and folks will say you're training him personally. If the jobs you gave him," Terry continued in a significant tone, "should turn out to be too hard and he kept falling down, folks would say you gave him a chance, but he didn't have the stuff. Get the idea?"

"Sure," Slade chuckled. "I'll tell you what, I'll give him the job of runnin' down that road agent. He can work full time except when I'm away, or he's needed for posse work."

"A sort of undercover man," Terry suggested. "I'll put him to work in my saloon a bookkeeper and cashier. Nobody need know he's a deputy at first."

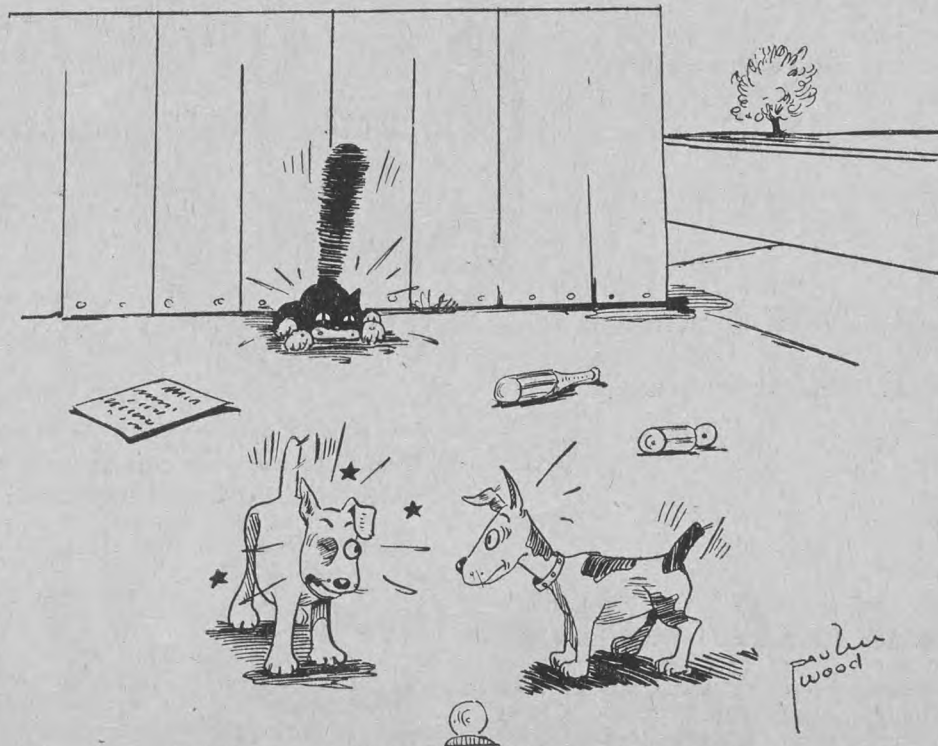
"They'll have to know that," Slade argued, "so folks will think I'm a good scout on account of givin' Jud a job. Part time deputy we'll call him."

Terry picked up a deputy sheriff's badge off the desk. "Mind if I pin this on, Slade? It'll make a hit with the kid. He'll write home and old Buck will know I'm keeping a promise I made years ago to do anything I could for him at any time. We politicians have to deliver the goods you know, Slade."

JUD TAIT looked over The Dutchman's with interest. There was a long bar on the south side of the big room, a small stage on the eastern end, tables and boxes on the north side, which left the west end available for the ornate entrance. The bar and stove bore the marks of bullets that had missed their mark during the years. Jud felt there was something substantial about the place, as if it would go on and on resisting time and men.

As word spread over the range that Buck Tait's boy was working at The Dutchman's, business increased. Men wanted to see what Buck's son looked like and they wanted to talk over the old days, or enquire about old Buck's health.

An old desert rat entered one day, stared briefly at Jud and shook his head.



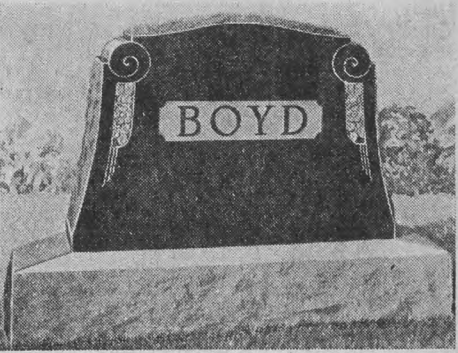
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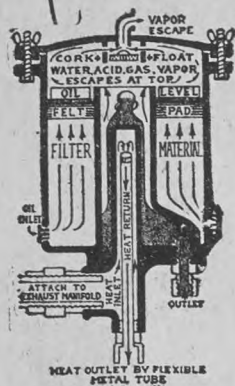


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"Hell," he snorted, "that ain't a Tait—that's a danged gadfly." A ripple of laughter swept through the crowded saloon. Jud grinned. "Grin and be damned," the old fellow added resentfully, "there ain't no room for pint-sized deputies in Sweet Water County. We're all gallon-sized men here."

"Don't mind him," Terry Mulligan said in a low voice, "he's just old and childish."

"I don't mind him," Jud answered, "but I mind his words, plenty. Already they're calling me Gadfly. I could tell by their faces they thought it was a fine nickname."

"Remember a gadfly can bite like hell," Terry said significantly.

"Ridicule is a handicap," Jud said.

"You took the hard way in the beginning," Terry reminded him. "You came to a county where your father set a high mark. That's always a handicap, but it tests a man in the end."

Sheriff Slade came in at that moment and ordered a drink. His eyes roved over the men lined up at the bar. "Who's that big fellow over there spendin' so much money?" he asked Jud.

"That's young Stubblefield," Terry answered. "He came in on the stage with Jud. Nice fellow, but kinda green. He's trying to learn all about the rougher side of life, he says."

"Tell him to ease up," the sheriff advised. "He's invitin' trouble. Somebody's liable to knock him in the head for his money and that'll give your place another black mark, Terry. A committee called on me today to close down the place. That makes it tough on me."

"Why?"

"Well, some of the folks know I've offered to buy you out three, four times. If I close you down, because it's a disorderly resort and a breedin' place for crime as the law and order women claim, it'll look like I was tryin' to fix up a bargain for myself. Savvy?"

"I'll tell my bartenders to cut down on Stubblefield's liquor," Terry said.

The sheriff turned to Jud and those within earshot. "I'm goin' away for a trip, and some folks claim Mesquite City would be a better place with a Tait runnin' the district. My motto is, we aim to please—so I'm puttin' you in command, Jud." His eyes narrowed, and behind the narrowed gaze Jud felt he could detect the resentment of years. "Don't disappoint the folks, Jud. Don't disappoint 'em."

"How long will you be gone, Slade?"

"Week or ten days. Cattle rustlers," the sheriff tersely explained. "That road agent may give me trouble when my back's turned, but I'm hell on cattle rustlers. Maybe with a Tait lookin' after things here and me takin' care of the rest of the county we'll make rustlers and killers hard to find. How about it, folks—do you like the combination of Tait and Slade?"

A cheer rattled the backbar mirror and Slade walked out.

Jud's face was serious as he followed Terry into the saloon office. "That was a dirty deal," he declared in a low, angry voice, "Slade deliberately focused attention on me—put me out on a limb. He invited every killer in Mesquite City to try his luck, you might say."

"It looked that way," Terry agreed. "It's a set-up your old man faced years ago. A gang tried to make a sucker out of him. He accepted the challenge and won out. If you're as good a man as your father was you'll be two jumps ahead of the drygulchers."

"If I fail?" Jud suggested.

"Then you'd better go back to the Coast and try office work," Terry said. "That's what your father thinks you're fitted for, you know. I've never known him to be wrong."

"That's the way it'll be. Win I stick, lose, I go back to the Coast and get myself a high stool, ledger, pen and two bottles of ink."

"What're your plans?"

"Wouldn't you and a lot of other folks like to know!" Jud retorted. A flush stole slowly over Terry's face, but he didn't answer. It looked to him as if Jud were warning him, along with the others.

THREE hours after the sheriff left town, Jud saddled the horse he had bought on his arrival and made a wide circle of Mesquite City. "A stitch in time saves nine, as my grandmother used to say," he drawled, "and if I can find

tracks leading toward one of the main roads I may do myself some good. That drygulching road agent is a cinch to try his luck."

He returned to town late the following afternoon without finding a track. "What luck?" Terry asked.

"None at all."

"I think you should know that Stubblefield pulled his freight early this afternoon," Terry said.

"I refused to sell him any more liquor last night and advised him to straighten up. He was cold sober when he pulled out today."

"Which way did he go?"

"Said he was heading for Calico Valley," Terry answered. "He likes that country and said he might buy a piece of some ranch and go to raising cattle. The kid's got money behind him. His father died somewhere back East, I guess."

"Calico Valley," Jud mused. "Thanks, Terry."

He saddled a fresh horse from the sheriff's string and headed for Calico Valley. By sundown his horse was badly lathered, but he kept the tough animal moving at the killing pace. A dull red glow against the trees bordering Calico Creek filled Jud with a sense of relief about ten o'clock. "That's his camp," he sighed. "I'm going to stick with him like a brother until he gets to the ranch. If I can't pick up the drygulcher's trail I can at least protect a potential victim."

"Hello, Stubblefield," Jud yelled. "It's Jud Tait."

There was no answer. The little deputy drew his gun and approached warily. "Hell," he said softly, gazing at at figure bedded down for the night, "sound asleep." He dismounted and stared hard. The blankets above the man's chest weren't lifting gently up and down as they do when a man breathes deeply in sleep.

Jud pulled the blankets and looked down on Stubblefield's purple face and sightless, staring eyes. "Just about ten minutes too late," Jud groaned. Evidently some sound had alarmed Stubblefield. He had straightened up in bed and the killer had shot him from behind. He had fallen back, with a bullet through his spine.

The killer had torn open the dead man's shirt and then slit a pocket in the under shirt in which Stubblefield's wealth, or at least a portion of it, had been sewed. The killer had then drawn the blanket over the dead man's face and quietly departed.

JUD remained at the camp until daylight, then he examined the trees and brush for signs of the drygulcher's identity. As usual he had covered his boots with grain sacks; as usual he had taken to the stream as soon as he mounted his horse. Horses and cattle approached the stream in countless places to drink. There were a dozen spots where the road forded the creek—where the killer could emerge without hoofprints attracting attention.

Terry Mulligan met Jud three miles from Mesquite City. "You were gone so long," the saloon keeper said, "I figured something had happened. There'll be hell to pay now. Stubblefield made a lot of friends. They'll probably try and close up my place."

The Sweet Grass Leader, Mesquite City's leading newspaper, came out that night with headlines. The Leader was the official mouthpiece of Sheriff Slade's political gang. There were headlines about a gadfly that couldn't bite. One paragraph read:

"Certain elements have held Old Buck Tait up as the model sheriff. All well and good. There was none finer. The average man can't hope to equal his record. Nor can Sheriff Slade, who is better than average. Generously Slade put in Jud Tait who was trained by his father and knows all the tricks in the sheriffing trade. The result, another murder. Isn't it about time Sheriff Slade's knockers crawled into their holes and pulled their holes in after them?"

Jud tossed the paper aside. "And I haven't a clue," he groaned, only plenty of suspicions."

"Only suspicions?" Terry queried softly. "That was all your dad ever

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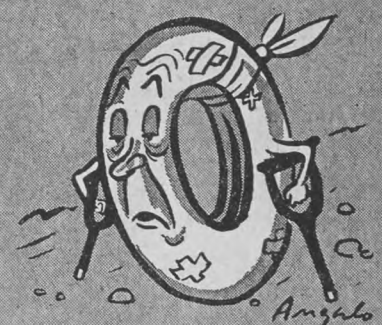
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needed. If he didn't have clues, or evidence that would convict a man, then he'd make the guilty party trick himself into damaging admission."

"I know he did," Jud answered. "If I don't do it, I'm on my way out. Slade will fire me just to humiliate dad. I knew what I was walking into when I tackled the job, so win, lose or draw I won't whine. But it goes hard to have dad humiliated."

"Maybe this will touch his pride," Terry said kindly, "but nothing can ever touch his record."

Sheriff Slade brought in two cattle rustlers five days later. He shrugged his shoulders when Jud made his report, but made no attempt to conceal the glint of satisfaction in his eyes. "Even a Tait couldn't find a clue, eh?" he observed. "The road agent is a smooth one."

"I guess I might as well go over to The Dutchman's and go to work," Jud said. "Yeah, you might as well," Slade agreed. "Better tell Terry to find you a full time job. You're through."

"No, I'm not through until I've cleaned up this case," Jud said evenly. "I've been telling around I'd arrest the killer within two weeks. It'll look bad if you fired me before the two weeks are up."

Slade stared at the ceiling. "All right," he agreed after a moment's thought, "you're on the payroll 'til the first of the month. Then there'll be a change."

Jud returned to The Dutchman's and asked Terry to put him on tending bar. "They'll think Slade fired you," Terry argued.

"Let 'em," Jud answered shortly.

THREE days passed without incident. Jud wasn't the best bartender in the world, but he realized, also, that his customers weren't the most particular either. As he worked he realized that his apparent failure to make good as a deputy pleased the border outlaws who had felt his father's iron hand.

"This here Gadfly Tait lasted sudden, didn't he?" one of them drawled.

"He ain't even a good bartender," a companion added, "what with bum bartenders and the law and order lady folks raisin' the devil, it don't look as though Terry Mulligan will be in business much longer."

Jud said nothing and kept right along saying it until the fifth night, then he called Terry Mulligan. "I'm going to arrest the Phantom Road Agent," he said, "or—shoot it out."

"With your dad's old guns?" Terry queried.

"That's what they were made for," Jud replied.

"Listen, son," Terry warned, "you're sure you're not making any mistake? If you kill the wrong man there'll be hell to pay. The sheriff's out there—in case you need any help."

"I'm going to try and do it alone," Jud answered.

"It'll make a hit if you do," Terry agreed. "I'll be behind the cash register, ready to lend you a hand if you need it."

Jud walked slowly through the crowd to the main entrance. He closed the heavy doors and locked them without attracting attention. Next he locked the smaller doors leading from the stage outside. He walked behind the bar and shouted for silence. "The man who killed Stubblefield and the others is in this saloon," he said. "He just passed a five dollar bill stolen from the dead man."

A buzz of excitement swept through the saloon. The card games, the eating, drinking, and almost the smoking stopped. "Name him!" the sheriff yelled.

"I will," Jud answered, "but first you'll be interested in details. When Stubblefield left home his mother sewed a considerable sum of money into a special undershirt pocket. The stitches went through the ends of some of the bills." He held up the dead man's shirt. "When the killer robbed him, he was in a hurry. He yanked out the bills and the stitches tore through the edges of the bills. Look! The stitches fit the torn places in this five I hold in my hand. In the interests of justice you innocent men won't mind being searched. But—keep your eyes on those about you. The guilty man will try to get rid of the roll or plant it on some other fellow."

At any other time Jud would have laughed. Not a man present relished the idea of the money being planted on him. They were as shy as skittish horses. Each eyed those around him.

"I'll guard the door," Sheriff Slade shouted, "and detail two men to search the others."

"Can you name the man?" someone yelled. "If you can, name him."

"When I name him," Jud said, "those nearest be ready to grab him, or—duck hot lead. Ready. It is Sheriff Slade."

EVEN as Jud made the charge, Slade made a dive for the heavy iron stuff. "You may get me," he yelled, "but I'll take plenty of you with me. Up on to the stage all of you. In ten seconds I start shootin' at every man who ain't on the stage."

Tables, chairs and spittoons were scattered as the crowd stampeded for the stage. The crowd flowed like a breaking wave over the footlights and came to a stop. Jud slid along the bar in an effort to execute a flank movement on Slade but the latter whirled and fired. The door lock shattered. He blazed away at the heavy lamps, and the room darkened as bullets shattered chimneys and extinguished lights.

"You're going to lose your man, Jud," a voice warned. There was a taunt in it. "Your old man didn't hesitate to risk his skin to catch a killer."

"Easy Jud," Terry Mulligan warned. "Somebody's trying to trick you into exposing yourself."

"He's right," Jud answered. "Dad never hesitated."

He leaped over the bar and landed on his left hand and knees. Slade's lead dug a furrow in the floor two feet ahead of him. Jud's right hand moved faster than the eye could follow. But in the one light which still burned plenty of eyes were trying to see each move the diminutive deputy made.

A split second before Slade gained the door dust spurted from his clothing on both sides. He fell half in and half out of The Dutchman's.

As the coroner and his men started towards the morgue with sheriff's remains old timers who had known Buck Tait crowded around. "Your old man couldn't handle a gun that fast," one of them said.

"Buck was a big man," Terry Mulligan said, "and big men are slower. Colt made all men equal, but God made little men faster on the draw. The sheriff was the last man I figure was guilty."

"He knew he wasn't popular and decided to make a clean up. He'd time his cattle thief chasing with the departure of some easy mark. He'd kill his man, rob him, then hightail it after rustlers. It made it look as if the Phantom Road Agent never lifted a hand until the sheriff was out of town. I suppose he figured the murders were ruining your business, Terry, and he could buy you out for a song."

"But what was your tipoff?"

"That came the day the stage stopped and brought in a body. I found fuzz from a faded blue shirt sticking to the bark of a tree. The sheriff had a shirt like that, but I knew I couldn't prove murder on that evidence."

"But he made a mistake when he tried to pass money with stitches in it," Terry observed.

"He never tried to pass money with stitches in it," Jud explained, "because there weren't any stitches in the money. I had to trick him into admitting guilt I couldn't prove, so I took a few stitches in that note, then tore them out. The sheriff's conscience did the rest."

"His conscience and your fast draw," an old timer chuckled.

Terry Mulligan rarely wrote letters and when he did he usually put it off as long as possible. This night he decided to take a stitch in time on his own account. He went into his private office dipped a pen in ink and began:

Dear Buck:

As sheriff there was none better, but as a framer-up of your own son you're a joke. This letter is going to tickle you to death. First, this county's going to have another Tait in the sheriff's office—Gadfly Tait. And this is how it happened—

And while The Dutchman's cash register rang merrily, the Irish owner enthusiastically wrote on, and on, and—on.



The Countrywoman

Alberta Farm Women Meet

FARM people, through their organizations in Alberta, accord their leaders a warmth of loyalty, which I doubt is equalled or surpassed in any other province in the Dominion. This holds true of women as well as men. The year 1940 marked the silver jubilee of the United Farm Women of Alberta and it marked the election of Mrs. Winnifred Ross as president. At the annual convention, held during the second week of January, 1946, in Calgary, Mrs. Ross stepped down from that office. Her successor, unanimous and unopposed choice of the meeting was Mrs. M. E. Lowe, a native Albertan who was born on a farm at Namao and married a farmer in that locality. Mrs. Lowe is a product of the U.F.A. movement having received her training in the Junior organization, becoming its first vice-president, later a member of the U.F.W.A., serving for a number of years on the Board of Directors and latterly as first vice-president.

As a token of their esteem and good wishes the delegates presented Mrs. Ross with a chest of an eight-person set of silver flatware. Mrs. Ross whimsically remarked that she had not known quite what she would do with her time, when she decided that she would no longer let her name stand for election to office, so she had bought and planted several hundred gladioli. She invited her U.F.W.A. friends when possible to visit her at her farm home near Millet and to enjoy with her the wealth of color and bloom she expected to have in her garden.

The president represented the organization on other public bodies: serving as a member of the Provincial Regional Advisory Committee of the Wartime Prices and Trade Board; on the Alberta Council on Child and Family Welfare; on the Alberta Association for Adult Education and as member of the standing committee on Agricultural Education. Mrs. Ross gave during the year two coast-to-coast radio talks on invitation of CBC and went with the delegation which presented the resolutions from the 1945 convention of the U.F.A. to the provincial government.

It should be remembered that the U.F.W.A. have no paid organizer, they share the services of their secretary with the U.F.A. The officers of the U.F.W.A. have their expenses paid for attending meetings and doing the business of the organization. What it means for farm women to take time off from home and family duties in these strenuous times can be readily appreciated. During 1945 there were seven meetings of the U.F.W.A. Executive, two meetings of the entire Board of Directors; three meetings with the U.F.A. Board and four meetings with the U.F.A. Executive which the Executive report pointed out were "appreciated very much because of the deeper insight given into the organization as a whole. As an executive we were given the opportunity of sitting in on the sessions of the two committees from the U.F.A. and the A.F.U. when the outline was drawn up for the proposed merger of these two organizations into the Alberta Federation of Agriculture."

A pleasing personal feature of the meeting was the introduction of the directors. The president endeavored to sketch briefly the history and qualifications of each constituency director. Where her information or memory failed to supply the details she appealed to the director to fill them in herself. There were many moments of friendly laughter as this was done. One could not fail to see that the delegates appreciated seeing and knowing the officers who had been working for them. It balanced nicely against the long hours of listening to speeches, reports, statistics and discussion of resolutions. It may help to account for the strong "family feeling" in the U.F.W.A.

THERE were approximately 100 voting delegates and well over 100 visitors and friends, who were accorded the privilege of taking part in discussions. They filled to overflowing the Oval Room of the Palliser Hotel. The number of U.F.W.A. locals now stands at 98, with a membership of 1,732 not counting life members, permanent paid-up members of locals and members-at-large. The executive for the coming year consists of: President, Mrs. A. M. Lowe, Namao; first vice-president, Miss Molly Coupland, Lethbridge and second vice-president Mrs. J. K. Sutherland, Hanna. As fraternal delegate Mrs. G. P. Bradley of Milestone brought greetings from Saskatchewan.

I quote here an observation I made in writing the story of the 1940 convention of the U.F.W.A.: "All three of the principal farm organizations have argued at times the point as to whether the women's association made best headway on its own or whether women did the most good for their organization and them-

Much of interest and significance to rural people found in convention of U.F.W.A.

By AMY J. ROE

selves by staying in the main association and working in joint locals and joint sessions of the annual convention. The U.F.W.A. has pursued a policy of having more separate sessions for the women members, a greater number of women's special committees working, more speakers on subjects in which women are vitally interested and more discussions for women members by themselves. The result has been that they have come through intact. The U.F.W.A. weathered the depression years. It is in better running shape today than the farm women's organization in either of the neighboring provinces, Manitoba or Saskatchewan."

That holds true to the present year. The U.F.W.A. now appear to be at a cross-roads in their history. The merger of the two Alberta farm organizations was uppermost in the first day's discussions, in which the women joined. There was no discussion of it at the separate sessions. A year at least will roll around before any drastic steps are taken. In all likelihood there will be another annual convention at which the proposed merger and its basis will be further discussed. If and when the merger takes place, what happens the U.F.W.A.? There has not been a special and separate place for women's membership in the Farmers Union. For the time being the U.F.W.A. will continue to function as it has. It was in 1915—just 31 years ago that the Women's Auxiliary to the United Farmers of Alberta was formed. The following year

Calm After Storm

By GILEAN DOUGLAS

*Surely, with my arm stretched,
I might touch this silence;
Surely it would lie here softly on my hand
And all of the loud things,
The hatred and the violence,
And of the foul things I cannot understand
Would lift from my heart
As the mist from the river,
Would lift from my mind
As the cloud from the hill;
I could stand apart
From the gift and the giver,
Could look for and find,
Where everything is still,
The small, firm flowers of my own mountain land.*

the organization was set firmly on its own feet. It has had a list of distinguished presidents: Miss Jean Reid, Mrs. Irene Parlyby, the late Mrs. S. Sears, Mrs. R. B. Gunn, Mrs. Amy Warr, Mrs. R. Price, Mrs. Molloy-Berger and Mrs. Ross, each of whom has made a genuine contribution not only to the organization which they served but to the public life of their province. At the local level women members are of great importance to the rural social outlook and it is hoped that those who implement the proposed merger will have the good judgment to recognize this.

Although it has achieved 30 years of activity "standing on its own feet" the U.F.W.A. is not inclined to dwell on the past. It is forward looking. This year one could not help but be impressed with the number of younger women present and taking part in discussions. They were well informed and expressed themselves easily on a variety of subjects. The reports of conveners of standing committees on: Co-operation, Education, Legislation, Horticulture, Postwar Agriculture, War Work, Social Welfare, Postwar Reconstruction, Health and Young Peoples' Work were given. An effort was made to have each report followed by introductions of resolutions on related topics.

The Executive in its annual report showed a flexibility of procedure, that is all to the good, when it pointed out: "We placed International Affairs on the program again and propose this year to begin our study of the importance of Food In Relation to Peace. Since the programs were printed a suggestion has been made that we might profitably have had a convener of Rural Housing."

THE U.F.W.A. has stood as special sponsor to youth. It was through them that Young People's Week at the University of Alberta was established in 1920 and

continued each year since. Largely because of that week and friendships formed the Junior U.F.A. came into being. It is now an integral part of the U.F.A. and has fed the parent organization with some promising members. One afternoon session of the U.F.W.A. was given over to Junior Work. The officers were introduced. Miss Molly Coupland, who is a graduate of the Juniors read a report on Farm Young People's Work, pointing out that University Week had broken all records with an attendance this year of 200 and that Captain George Thring, a former Junior U.F.A. president had attended the World Youth Congress held in London, England, in November, 1945, as representative of the Canadian Federation of Agriculture. Captain Thring addressed the convention giving his impressions of that meeting where young people from 64 nations gathered. Over 600 delegates and visitors had attended, 10 of whom were from Canada. "The main idea," he said, "was to try to reach a decision how we could help the cause of peace. Through the Congress of Youth we hope to make our voice heard in bettering that cause."

Lawrence Proudfoot, Lacombe, told how it is hoped to establish a summer camp on the Bow River about 10 miles from Calgary, where boys will meet for a holiday, beginning about July 1. This will not be such a strenuous study week as that held at the University but will be combined holiday, rest and study camp.

IN the report on Education, the convener Mrs. W. C. Taylor, Edgerton, said: "During the past year I have visited groups in different parts of the province and have no hesitation in saying that the majority of farm women feel that, in spite of the new school system, we are turning out a generation of children who are weak mathematicians, poor spellers and worse readers. Bad grammar has become so common that it passes almost without comment even in the classroom. The first nine grades should provide a foundation for further study or for use in whatever life work is undertaken."

Resolutions arising from the report asked: that federal grants to the province be made for education. That more emphasis be placed on spelling in normal school training. The basic subjects: reading, arithmetic and speaking be set up in courses and be made essential for those seeking Canadian citizenship. That better groundwork in spelling and arithmetic be given beginners in school and that work assignments of pupils should have inspection and correction. Asking that better trained teachers be hired by local school boards and that salaries of teachers be raised accordingly. That there be more regular inspection of rural schools. That farm women's rest week be reopened at Vermilion School of Agriculture, now that the buildings have been released by military authorities. That the Robert Gardiner scholarship be made the special project of the U.F.W.A. in 1946.

Health resolutions arising in the discussion following the report of Mrs. George Inglis, Penhold, occupied a great amount of time in discussion. Those passed asked: for the appointment of district nurses in many areas in Alberta, where health services are not adequate. That compulsory, yearly medical examination for all residents of Alberta be established and paid for by the government. That venereal disease check-up by competent doctors be made compulsory. That the government be commended for its educational work on V.D. and be urged to make treatment compulsory for everyone suffering from this disease. That applicants for marriage license be requested to produce a certificate signifying freedom from V.D. That arthritis be included in National Health Bill on same basis as T.B. and cancer. That the provincial government be asked to raise the amount under the cancer fund to cover diagnosis, treatment and hospitalization. That the Dominion government be petitioned to establish state medicine. That the Dominion government grant pensions to cripples.

Other resolutions on various subjects asked: That a fair portion of the 50 million dollars for research set under National Housing Act, be devoted to working out plans, testing materials and models for farm houses. That the federal government investigate and destroy cartels. That a system of training household workers, graded for efficiency and pay be instituted in Canada. That packages containing rubber jar rings be stamped with the year of manufacture. That the criminal code be amended to make it a punishable offense to leave small children alone and unprotected against fire. That persons obtaining Canadian citizenship be regarded as Canadians regardless of the nationality of their forefathers. That voting age in the Dominion and the province be lowered to 18 years.

Weaving - - - A Girl's Hobby

Expressing herself through an old art brings joy and interest into a young girl's life

By KATHLEEN STRANGE



Kay Strange works at her loom and her mother is an interested observer.

VERY great man once said that: "Culture of all life—of the brain and of the soul—begins with the culture of the finger tips. Teach your children to use their hands."

My father encouraged me in my own chosen hobby of writing and once said to me, "When you have children of your own be sure and encourage them in some useful hobby. And be sure, if possible, that it is a creative hobby." At nine years of age I was writing little stories and at twelve I actually won a prize for a story which was published in a children's magazine. My stories came out through my finger tips—I learned to use a typewriter when I was only fourteen—and my hobby of writing has brought me happiness and a measure of reward ever since.

When my own children came along, I remembered my father's words. I started them with hobbies while they were still quite young. Mary, at six, began to learn to dance—it was her feet she used rather than her finger tips—and dancing was her hobby until she left school. Later she took up the hobby of leather work and she has produced some useful and beautiful things. Donald, my son, was making model aeroplanes when he was eight and later was winning prizes for his creations at local model aeroplane shows. His hobby led him directly into the Royal Canadian Air Force before he was eighteen.

It is about my youngest daughter's hobby, however, that I would like to write at more length, for hers is a hobby, I think, that should prove a good one for any young girl.

Kay Jean is thirteen years old. Her hobby, up until recently, was making dolls' clothes. She has always been interested in designing and in making up materials into pretty things. Now she is making the materials themselves. She has learned to weave.

Kay's interest in weaving arose from a visit to her father's office in the fall of last year. A weaving project was in operation at the time and Kay was shown the looms, the spinning wheels, the carding machines, the bobbin racks and the warping frames that were on display. She watched one of the weaving teachers at work. She began to ask questions and soon she was trying her own hand at weaving.

To the teacher's and her own, amazement Kay took to weaving like a duck to water.

"Why, it's easy," she said. "Please, daddy, may I learn to weave?"

Her father, a weaving enthusiast himself, was delighted.

"I'll buy you a loom for a Christmas present," he promised. "And you shall start weaving lessons right away."

By the time Kay's loom—a twenty-seven inch four harness six treadle loom of polished maple to begin with—arrived from Quebec, Kay had already received several lessons from a good weaving teacher. She knew how to make a warp and how to set it up on a loom and how to do the simple basic or standard weaves. When her own loom was installed, Kay was ready to start on some simple but useful articles.

(This 27-inch loom, by the way, has since been exchanged for a 45-inch loom, a size large enough to make yardage cloth, suitable for dresses and suits, window drapes, and so forth. She also now has her own warping frame and may also one day have her own spinning wheel.)

This young girl has now progressed (in less than a year) to a point where she can tackle quite complicated designs and combinations of colors and where she is adept with either wool, cotton or linen thread. She has already made many beautiful articles for herself and for me, her mother, and some she has sold for quite good prices. Among them are a charming red and white checked luncheon set, in fine cotton, consisting of a centrepiece, six place mats and six serviettes; several knitting or shopping bags in colorful designs; wide scarves of the softest wool; gentlemen's ties in tasteful designs and a handsome set of natural linen table napkins. She is at present busy on a beautiful luncheon set which will be a wedding gift to her recently married elder sister—it is a combination of linen and cotton, in white and turquoise blue—a beautiful piece of work and one of which she can well be proud.

Every day this young girl does her stint at the loom, just as another child might do her practising at the piano. She gets up early in the morning and weaves for half an hour before breakfast; she does another half-hour's work when she comes in from school at four; and she often works for an hour or two in the evening.

A loom, of course, takes up quite a bit of space. We had to dismantle a bedroom to accommodate Kay's loom. But the weaving room is the most popular room in our house. There Kay reigns supreme. I am permitted to dust and

vacuum but I am not allowed to move or touch anything! When he enters the weaving room, her father is plain Mr. Jones, her assistant, and he has to do what she tells him. He is not allowed to smoke. He is permitted to make suggestions but not to give orders. It is quite amusing to listen to the conversations that take place, Kay admonishing her father with the words: "Now, daddy, don't get excited! We'll have it fixed in a moment." "No, don't be impatient, I know how it's done."

At the end of every warp she sets up, Kay adds an extra eighteen inches or so on which to experiment, or to make what she and her father call their "dingle-dangles." These are hit and miss designs, or combinations or different designs, many of which they evolve for themselves. Her father has calculated that there are some eighty-seven

billion different changes possible on any one warp, and there are thousands of possible warps. The opportunity for creating new patterns and designs, therefore, is practically endless.

Kay has a growing library of excellent text books on weaving and one of the most famous weavers in the United States, Marguerite Porter Davison, author of *Pennsylvania - Dutch Home Weaving Patterns*, and *A Handweaver's Pattern Book*, has taken such an interest in this young weaver's work that she recently created a new design, which she has dedicated to Kay and which she calls "Kay's Design."

My young daughter is not only pursuing an interesting and fascinating hobby, but she is learning a most useful and beautiful art, one which may later prove to be a profitable avocation, perhaps indeed a remunerative vocation. The child, in addition, is learning the joy of creation, the nature of design, the appreciation of color, and the discipline of regular work, all of which things undoubtedly will help her in other phases of life. I recommend weaving to all mothers who are seeking a hobby for their growing daughters.

Color In The Kitchen

Choice of good combination of shade for walls and trim goes far to make the room a pleasant working place

By MARION R. McKEE

DECORATING a kitchen can be fun. Seeing your kitchen take on new bright color not only improves the appearance of the room, but also improves your outlook on life, and indirectly your own appearance. All of us look better if we feel happy, and what could make a busy housewife more happy than an attractive workshop. If you are pleased with your surroundings you will not become so tired after a day's work, and things won't tend to "get on your nerves." It has been estimated that a homemaker on the average farm spends about 70 per cent of her working hours in the kitchen, and that room and its appearance is very important to her.

The materials needed are comparatively few, and reasonably inexpensive, in comparison to the amount of pleasure they give, and also to the increased efficiency they inspire. A few cans of paint, a few yards of curtain material, three or four cans of different sizes for flour, cookies, etc., and some colored plastic handles are needed.

A good thing to remember is choose a color scheme that you yourself like, as you are the one who has to work in the kitchen. Here we may need a little refresher course on color so as to decorate a kitchen in the most attractive schemes. Colors fall into two groups; that is the "cool" colors, and the "warm" colors. The names of the two groups are descriptive of the effect they have on the person who is looking at them. "Cool" colors which are green, violet, blue, white, grey or silver, give an illusion of coolness and so should be used in a room that is exposed to a great deal of light, or a room that is extremely warm. Colors that are "warm" are red, rose, pink, orange, yellow, and gold, and these should be used in a room that has little light, or one that is cold.

When you have decided whether a "warm" or "cool" color scheme suits your kitchen, here are a few combinations of these colors that would be attractive for a kitchen.

For a "warm" color scheme what could be nicer than: light yellow walls, a cream ceiling, buff woodwork, linoleum in red, yellow, brown, and cream, a row of red and cream painted cans,

red cupboard handles, and cream colored curtains trimmed in red. Another set of colors could be: pastel rose walls, a cream ceiling, slightly deeper rose woodwork, painted floor of dark buff, bright yellow cans, yellow and white curtains. Other combinations of "warm" colors in their many variations could be arranged, according to your own taste and liking.

Now to the "cool" color combinations. An attractive scheme could be: light grey walls, woodwork a slightly darker grey, medium green painted floor, bright green and orange print curtains, and your small cans and accessories in orange. Perhaps you would prefer a color scheme such as: light green walls, medium green woodwork, medium rust floor, bright yellow and orange curtains, orange and yellow cans and accessories.

When you have chosen colors for the kitchen and are about to buy the paint, here is a word of warning. Be sure and buy a good quality paint, as it will not only last longer but will preserve the painted surface much better than the so called "cheap" paints. Purchase a good quality brush. Because of the frequent presence of steam and grease in the kitchen, it is suggested that you use glossy or semi-gloss paint.

Enamel is ideal for small areas such as woodwork, tables and chairs, giving an attractive and highly durable finish that can be easily cleaned. It is not recommended for large areas, such as walls, because the heavy consistency of enamel makes it hard to brush on evenly, and if thinned too much with solvents, it sags in unattractive lines. Both paint and enamel may be cleaned easily with a damp cloth.

Be sure that walls are properly prepared for painting. If your walls were previously painted with a glossy paint, rub them with steel wool to make a rougher surface for the fresh paint to stick to. Be sure the old paint is perfectly clean before applying the new coat. Start by brushing off all the loose dirt. Flat painted surfaces are best cleaned with soap and warm water, with about 10 per cent turpentine added to the solution. In cleaning enameled surfaces use a milder solution of the soap, water and turpentine than you used for the flat finish, rinse with cold

Turn to page 65

TRY ROBIN HOOD GINGERBREAD

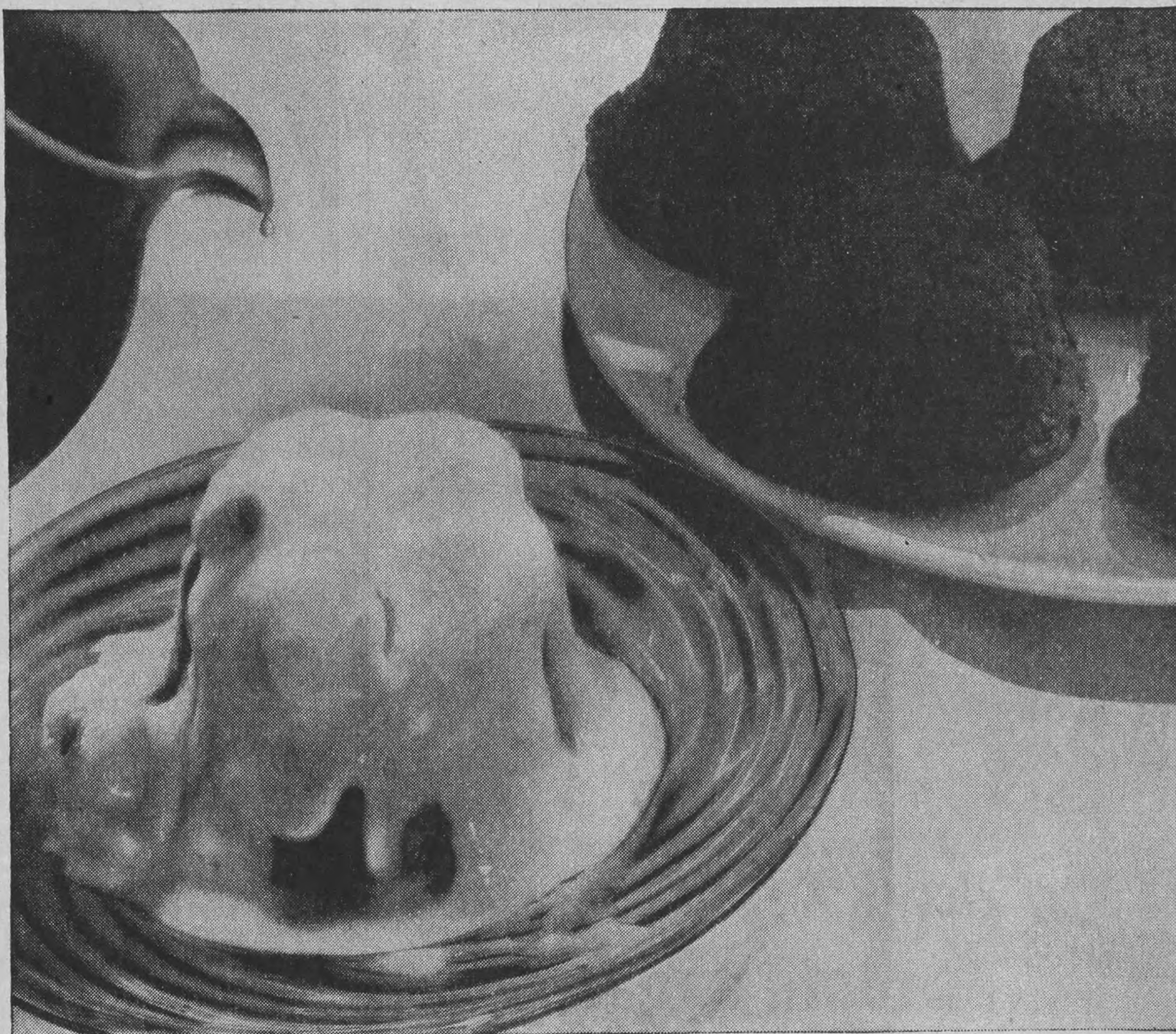
Served as a Surprise Pudding

An easy-to-make family treat, delicious with marshmallow or lemon sauce

● Open the oven door! That spicy, tempting odor filling the house tells the family of a treat to come . . . *hot gingerbread!* Surprise them with individual gingerbread puddings, baked in muffin tins, then snowed under with marshmallow sauce or the sweet-sour of lemon sauce. At the same time, bake a large Robin Hood gingerbread in a regular cake tin. It's a special treat just by itself . . . cut into hot, rich, reddish-brown squares that just crumble under your fork.

In fact, whenever you use Robin Hood Flour, you'll find all your baking is a real success. Every bag of Robin Hood contains a money-back plus 10% guarantee of satisfaction, you know. The secret lies in the way this fine flour blends with the other ingredients when stirred into the cake batter. That's why it's known as the easy-mixing flour.

Try it for yourself — for gingerbread, for light and tasty cakes and pies and rolls and bread . . . everything! Robin Hood Flour is a winner with farm families—and wins prizes in home baking contests, too.



Here's why this prize-winner is keen on Robin Hood Flour



Mrs. J. Stoddart of Shelburne, Ontario, looks after her own home and teaches Household Science as well. She treats her family to home-made bread every week, too. Yet she found time to win two first prizes at the Shelburne Fair with her Robin Hood sponge cake and oat cakes! Mrs. Stoddart says: "We have three children, and a growing family requires plenty of *good* baking. As a matter of fact, there hasn't been a bag of any flour but Robin Hood in my house for the last ten years."

ROBIN HOOD GINGERBREAD

¼ cup shortening (butter or lard)	1 tsp. baking powder
½ cup brown sugar	½ tsp. salt
2 eggs	1½ tsp. ginger
1½ cups sifted Robin Hood Flour	1 tsp. cinnamon
½ tsp. soda	½ cup molasses
	½ cup boiling water

1. Cream shortening; add sugar gradually and cream together until very light.
2. Beat the eggs until light and add to the shortening and sugar.
3. Sift flour; measure; add the soda, baking powder, salt and spices; sift again.
4. Mix molasses in boiling water and add alternately with the flour to the shortening, sugar and egg mixture.
5. Bake in well-greased individual muffin tins in a slow oven (300 to 325 F.). Baking time: 35 to 40 minutes.

Marshmallow sauce: Boil 2 cups sugar in 1 cup water till it hairs; beat in stiffly-beaten whites 2 eggs; slowly until mixture thickens, then faster. Few drops vanilla.

Robin Hood Flour

Milled from Washed Wheat

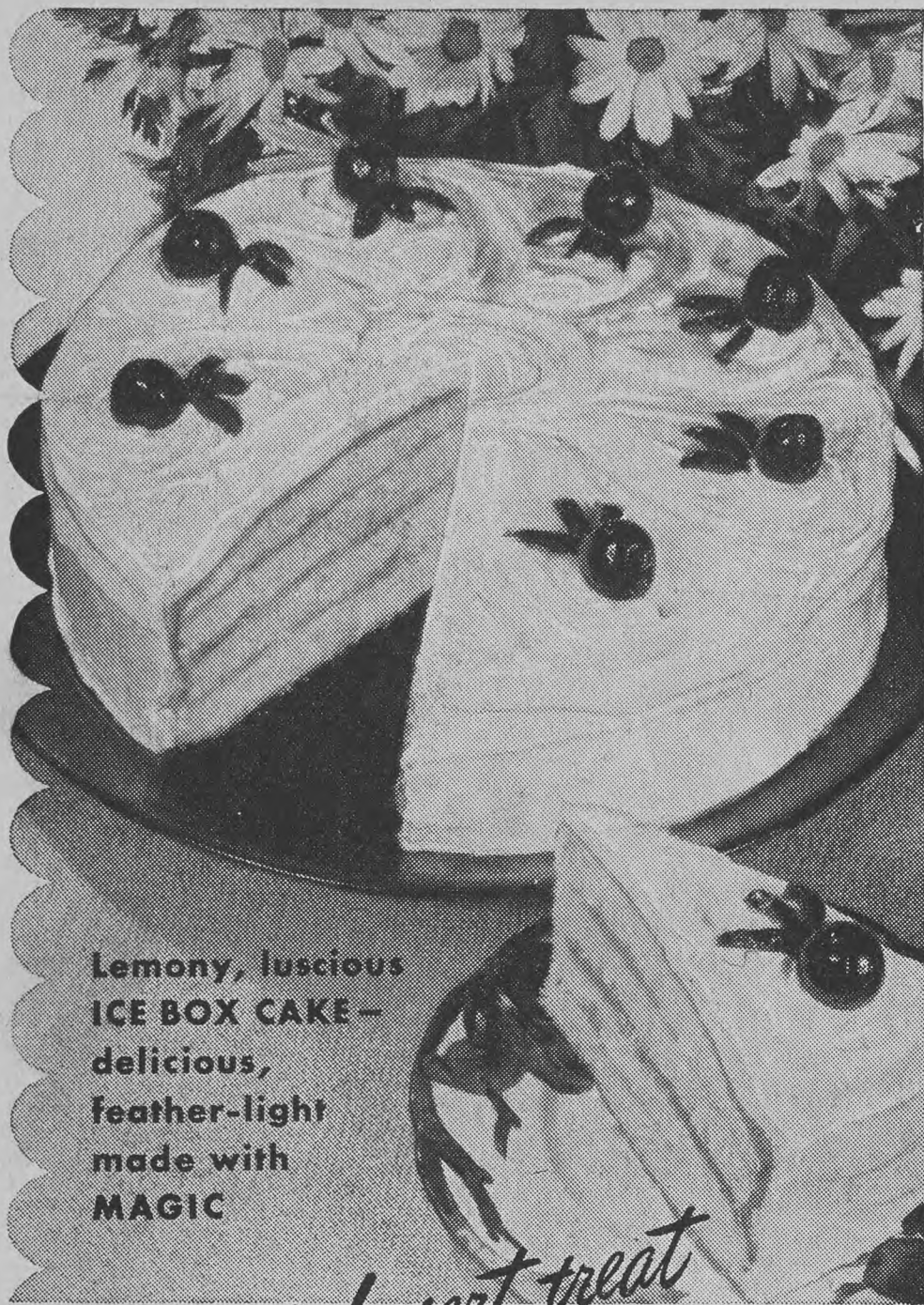
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LEMON ICE BOX CAKE

- | | |
|-------------------------------------|-----------------------------|
| $\frac{3}{4}$ c. shortening, melted | 4 tsps. Magic Baking Powder |
| 1 c. light corn syrup | $\frac{1}{2}$ tsp. salt |
| 2 eggs | $\frac{3}{4}$ c. milk |
| 2 c. sifted all-purpose flour | 1 tsp. vanilla extract |

Combine shortening and corn syrup. Beat in eggs. Sift dry ingredients together; add alternately with milk and vanilla to first mixture stirring well after each addition. Bake in 2 greased 9" layer pans in 350°F oven 25-30 min. Cool, halve each layer lengthwise making 4 layers.

LEMON FILLING: Blend $4\frac{1}{2}$ tbs. flour with $\frac{1}{2}$ c. water to make smooth paste. Add $\frac{3}{4}$ c. water and $\frac{1}{2}$ c. corn syrup. Cook stirring constantly until thickened. Beat egg yolk; gradually add cooked mixture to it. Return to heat; cook 1 min. Stir in 1 tbs. lemon rind $\frac{3}{8}$ c. juice. Spread between layers and on top of cake. Chill.

ICING: Combine 2 egg whites, $\frac{1}{2}$ c. corn syrup in top of double boiler; place over rapidly boiling water and beat with rotary beater for 7 min. or until mixture peaks. Remove; add $\frac{1}{4}$ tsp. lemon extract and frost cake.



MADE IN CANADA

Use Cottage Cheese

To give variety to winter meals serve cottage cheese in appetizing ways

By RUTH MEREDITH



For a tea or party attractive sandwiches may be made with cheese spread and olives.

COTTAGE cheese is attractive, inexpensive, nutritious, and tasty. It is delightful alone, or it can be made into numerous different dishes to bring variety and flavor into your mid-winter meals.

Cottage cheese is made from skim milk which some people consider to be livestock food and not fit for human consumption. Perhaps this idea comes from the fact that butter fat is the basis that milk is sold on, and in skim milk the butterfat is missing. Cottage cheese contains most of the protein in the milk, a good portion of the minerals, and is an excellent milk product from a nutritious point of view. The cheese may be creamed later if desired.

Easy Method

Here is an easy method of making cottage cheese. It can be made in small amounts, and requires very little equipment, all of which you have already.

Use clean, fresh skim milk.

Put milk in large container.

Add a little sour milk or starter, about one cupful to a gallon of milk to hasten the curdling. With a good starter, the skim milk will curdle in about 10 to 15 hours. Keep at a warm room temperature of 75 degrees Fahr. until curdled. Too high a temperature causes a tough cheese.

When the milk is firmly clabbered, pour into it about one-third as much boiling water as you have milk, or enough boiling water to heat the mixture to about 100 to 110 degrees Fahr.

Carefully stir the curd and let stand seven to ten minutes, or until curd has barely separated from the whey.

Pour the whole mixture into a cheesecloth strainer or a fine wire strainer.

If you prefer a mild flavored cheese, pour cold water over the curd. This washes it and removes the acid flavor. Salt the cheese to suit the taste.

Tasty and colorful combinations of cottage cheese may be used in many different appetizing dishes. Dates, prunes, halves of peaches, apricots or pears may be stuffed with a soft ball of cottage cheese, or the cheese may be rolled in broken nut meats. Place these on a lettuce leaf on a separate dish as a side salad, or on a plate with cold meat and potato salad for a supper dish. The cottage cheese may be rolled in nuts or blended with chopped pimento and these balls placed as garnishes on a

salad plate. Another colorful way to serve cottage cheese, is to stuff a whole green pepper, which has had the seeds and membrane removed, with cottage cheese. Chill this and slice, serving on a lettuce leaf with mayonnaise or boiled salad dressing. Left-over ham may be combined with cottage cheese and flavored with mustard, and this served on a lettuce leaf as a salad, or on a plate with cole slaw and potato salad.

Here are a few interesting and appetizing cottage cheese recipes to try.

Cottage Cheese Pie

- | | |
|------------------------|---------------------|
| $\frac{2}{3}$ c. milk | 1 c. cottage cheese |
| $\frac{1}{2}$ c. flour | 2 T. butter |
| 2 T. flour | 1 lemon (juice and |
| 1 egg yolk, beaten | grated rind) |

Heat the milk, add slowly to the sugar and flour which have been combined, then return to top part of double boiler and cook mixture until thick, stirring it constantly. Add the eggs and cook the mixture until egg thickens. Add cheese, butter and lemon. Pour into well baked crust. Cover with meringue and brown in slow oven.

Cottage Cheese and Nut Loaf

- | | |
|----------------------------------|--------------------------------|
| 1 c. cottage cheese | 1 T. lemon juice |
| 1 c. chopped nuts | 1 T. melted butter |
| $\frac{1}{2}$ c. dried bread | 1 T. chopped green |
| crumbs | pepper |
| 1 egg beaten | 1 tsp. salt |
| $\frac{1}{2}$ c. strained canned | $\frac{1}{2}$ tsp. onion juice |
| tomatoes | |

Mix ingredients together; pour into a well buttered baking dish and bake in a hot oven (400 degrees Fahr.) until firm; invert on a hot platter and serve with cream sauce into which has been stirred one chopped, hard-cooked egg and one tablespoon of minced parsley.

Cottage Cheese Temptation

- | | |
|----------------------|---------------------------|
| 12 slices bread | 1 can condensed to- |
| 1 c. cottage cheese | mato soup |
| 6 T. butter | $\frac{1}{4}$ tsp. salt |
| 1 large green pepper | $\frac{1}{8}$ tsp. pepper |

Trim the crusts from the bread slices and spread on one side of each with cottage cheese. Place two slices together with the unsprayed sides out. Place three tablespoons of butter in a frying pan and when melted and hot, brown the sandwiches on both sides in it. Remove to a platter and keep hot. Then melt one tablespoon of butter in the same frying pan and add green pepper seeded and chopped fine. Cook until the green pepper is tender. Add the condensed tomato soup, salt and pepper and pour over the toast. Sprinkle the top with cottage cheese and serve hot.

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Easily Mixed. Needs No Cooking.

Here's an old home mixture your parents probably used. But, once tried, you'll always use it, because it gives such quick, pleasing relief for coughs due to colds.

And it's so easily mixed. Make a syrup by stirring 2 cups of granulated sugar and one cup of water a few moments, until dissolved. No cooking is needed. Or you can use corn syrup or liquid honey, if desired.

Now put 2 1/2 ounces of Pinex (obtained from any druggist) into a 16 oz. bottle, and fill up with your syrup. This makes 16 ounces of truly splendid cough medicine, and gives you about four times as much for your money. It keeps perfectly, tastes fine, and lasts a family a long time.

You can feel this reliable home mixture take right hold of a cough. It loosens the phlegm, soothes irritation, and helps clear the air passages. Eases the soreness, makes breathing easier, and lets you get restful sleep.

Pinex is a special compound of proven ingredients, in concentrated form, well known for its quick action on throat and bronchial irritations. Money refunded if it doesn't please you in every way.

Winter Desserts

Tasty desserts help out meals for frosty days

By MARION R. McKEE

KEEP winter meals interesting with appetizing desserts. About this time of year the family are apt to be yearning for fresh fruit and other summer desserts, so the homemaker has to think up new tasty ones to whet appetites.

Instead of following a heavy meat, vegetable and potato first course with a steamed pudding, try a light custard, or gelatin. But if the first course is a salad, then fill up those empty spaces with an upside down cake or pastry. It's a good idea to serve hot pudding dessert if the first course was cold, and a cold dessert if the first course was hot. With a little planning winter meals can be tops.

Not only should desserts taste and look nice, but they should be planned to contain lots of health giving nutrients. Extra milk, eggs, fruit and other nutritious foods can be worked into your menu. Of course a sweet dessert is desirable, but there are lots of recipes that satisfy the sweet tooth and are still easy on the sugar ration. A trick to remember is to use naturally sweet fruits for desserts, and this will require less sugar.

Here are a few new recipes, and some old ones with a new twist. They are especially selected to add interest to meals, and to conserve on those precious sugar and butter coupons.

Apple Upside Down Cake

3 T. butter 3 apples
1/2 c. brown sugar

Melt the butter in a baking dish, add brown sugar and cook together 2-3 minutes. Pare and core the apples and cut each apple in half to make two thick rings. Arrange apple rings in the butter and sugar mixture.

1/4 c. butter 1/2 tsp. baking soda
3 T. white sugar 1/2 tsp. ginger
1/2 c. molasses 1/2 tsp. salt
1 egg 1/2 tsp. cinnamon
1 c. pastry flour 1/2 c. boiling water
1 tsp. baking powder

Cream butter and sugar together, add the well beaten egg and molasses and beat thoroughly. Sift the dry ingredients and add to the butter mixture. Lastly add boiling water, mixing quickly. Pour over the apples in the baking dish and bake at 325 degree Fahr. about 40 minutes. Serves six.

Cranberry and Apple Tarts

2 c. cranberry pulp 1/2 c. seedless raisins
2 large tart apples, 1/2 c. sugar
diced

To secure cranberry pulp, simmer the fruit in the least amount of water possible until the cranberries are soft. Rub them through a strainer and add the apples and raisins. Cook until the other fruit is tender and then add the sugar and cook until the mixture is thick and clear. Use as a filling in tarts cut in any desired shape from flaky pastry. Other fruit, such as pears, may be used with cranberry if desired.

Orange Custard

2 c. milk 1/2 tsp. vanilla flavoring
2 egg yolks 4 oranges
1/2 c. sugar 2 stiffly beaten egg whites
1/2 tsp. salt 5 T. sugar
2 tsp. flour

Heat the milk. Beat the egg yolks, mix 1/4 cup sugar, salt and flour and add to eggs, beating until smooth. Add hot milk and cook in double boiler over boiling water until eggs and flour have thickened the mixture, stirring constantly. Remove from heat and chill. Pare the oranges and slice into a serving dish. Add the vanilla to the chilled mixture and pour over the oranges. Add the five tablespoons of sugar gradually to the beaten egg whites and continue beating until smooth and glossy. Heap the meringue on top of the custard and serve.

Orange Bread Pudding

1/2 c. stale bread 1 orange
1/2 c. hot milk 3 T. sugar
1 egg

Soak the bread in the milk until the mixture is cold and beat lightly with a fork. Add the grated rind from one-half the orange and the juice of the orange. Beat the egg until light and add sugar and milk mixture. Pour into a custard cup set in a pan of hot water and bake in a moderate oven until firm in centre. Serve plain or with a hard sauce.

Make Gingerbread with Left-over Fat

Left-over fat may be clarified by cooking it with a small potato, cut in quarter-inch slices, to a pound or pint of fat. Put the slices of potato into cool fat, heat it gradually until the pieces of potato are well-browned and the fat ceases to bubble. Then strain the fat through a fine-meshed cloth placed over a strainer. The potato absorbs the flavors and attracts to itself some of the sediment; the remainder settles to the bottom of the kettle.

Gingerbread

2 c. of sifted enriched flour 1 egg, beaten
3 T. baking powder 1/4 c. milk
1/2 tsp. salt 1/4 c. clarified, left-over fat, melted
1/2 tsp. ginger 1/2 c. corn or maple syrup
1/2 tsp. cinnamon

Sift the dry ingredients together. Combine the beaten egg, milk, and melted fat; add this mixture to the dry ingredients, and stir in the syrup last. Bake it in a shallow pan in a moderate oven (350 degrees Fahr.) for 30 to 40 minutes.

Gingerbread muffins may also be made from this recipe. For muffins, use a hot oven (400 degrees Fahr.), and bake them from 15 to 20 minutes.

Mincemeat Coffee Cake

2 c. mincemeat 3 T. granulated sugar
1 c. sifted cake flour 1/4 c. shortening
1 1/4 tsp. baking powder 1 egg
1/2 tsp. salt 2 T. milk
1/2 tsp. cinnamon

Arrange the mincemeat in the bottom of a shallow baking dish about 10x6 inches. Sift together the flour, baking powder, salt, and two tablespoons granulated sugar. Work in the shortening until the mixture is crumblike in consistency. Then add the egg and milk beaten together. Spread on top of the mincemeat and sprinkle with the cinnamon mixed with the remaining one tablespoon sugar. Bake in a moderate oven of 350 degree Fahr. for about 40 minutes. Cut in squares and serve cake hot with or without cream. Serves six.

Queen of Puddings

2 c. scalded milk 2 egg yolks
1 c. of soft bread Tart jelly or jam
crumbs 2 egg whites
1 T. sugar 1/2 c. sugar

In a greased baking dish, mix the scalded milk, bread crumbs, the tablespoon of sugar, and the beaten egg yolks. Set the baking dish in a pan of hot water and bake in the oven at 350 degrees Fahr. until the custard mixture is set (until a blade or knife inserted in the mixture comes out clean).

When the pudding has cooled, cover it with a tart jelly or jam, and that layer with meringue.

Chocolate Souffle

2 T. butter 1/4 c. sugar
2 T. flour 2 T. hot water
1/2 c. milk 3 eggs
1 1/2 squares unsweetened chocolate 1/2 tsp. vanilla

Melt butter, add flour, and add milk gradually, while stirring constantly. Cook to the boiling point. Melt chocolate over the hot water, add sugar and water. Stir until smooth. Combine mixtures, add egg yolks well beaten; cool. Fold in egg whites beaten stiff and add vanilla. Bake. Serve with whipped cream or custard sauce.

Taste the Real Vegetable Flavour in this Lusty Soup



57

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Mildred Mae McKenzie
Home Service Director



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BASIC BISCUIT MIX

6 cups Ogilvie Flour 1 tablespoon salt
1 cup shortening
11 teaspoons baking powder

Sift, then measure flour. Sift three times with salt and baking powder. Cut shortening into dry ingredients until it is as fine as coarse corn meal. Use the same proportions for larger quantities. Store in tightly covered containers in refrigerator. This mixture may be kept on hand for many weeks.

SAUSAGE WHIRLS

8-10 link sausages (large)
2½ cups Basic Mixture
¾ cup milk.

1. Place sausages in frying pan. Cover with hot water and boil rapidly until water evaporates. Brown sausages in grease that is left in pan. Drain on absorbent paper. 2. Add ¾ cup milk to 2½ cups basic mixture. 3. Mix until dough is soft and leaves sides of bowl (Dough should be as soft as can be handled). 4. Turn onto lightly floured board and knead vigorously for 20 seconds. 5. Shape into ball and roll ¼ inch thick. Cut into strips 1 x 6 inches. 6. Twist strip of dough around sausage in spiral manner. Bake on ungreased baking sheet. 7. Serve warm.

Amount 8-10 sausage rolls. Temp. 475°F.
Time 12-15 minutes.



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Maybe You're Tired

Morale is important—Some of the things that pull it down

By MARGARET M. SPEECHLY

AFTER the strains and anxieties of the last few years, it isn't much wonder if you are feeling played out. Possibly all the sleep you can get isn't enough to rest your nerves and set you up for the day. In consequence, your spirits begin to slump.

One of the things underlined by the war is the importance of building up morale. In camps, factories, hospitals, and even in action no effort was spared to keep the spirits of men and women at a high level. To have let morale break down, or even sag, would have spelled defeat.

Here on the farm, morale is not one bit less important, but as a rule nothing is done about it. Things pile up, we get discouraged, irritable, cranky and all this is reflected in lowered spirits. Usually men manage better than women because they are able to get out more and are not constantly coping with the aggravations of every day living. Also men have gone in more for labor-savers to lighten their load. It paid.

How about your morale? You are almost certain to have too much to do (show me the farm women who hasn't!) and too little convenience. Is every day an endurance test? Do you enjoy life as you go along? (After all there should be some pleasure in living.) Are you perpetually harassed, worried, and beset with a feeling of futility?

Some people worry constantly, but urging them not to do so isn't a particle of good. Everybody has anxieties of one sort or another and if you must worry, pick on something you can remedy. As for the rest, just write them off. Nobody can be at her best carrying around a load of nagging worries.

Mental Attitude Counts

But a lot of work and insufficient tools do not necessarily spell defeat. Your attitude toward the work and when it is done may be just as important. As a rule it raises your spirits to get certain jobs out of the way early in the day when you are feeling fresher.

Washing done at the beginning of the week is not nearly so irksome as when it is left until Wednesday or Thursday. The amount of toil does not alter, but your feeling about it is very different. It's the same with housecleaning. The quantity to be waded through is the same in any case, but how much lighter your heart if you can get it out of the way in good time.

On the other hand, circumstances may demand that you do your main cleaning in the fall. Do not get discouraged if your neighbor brags about how much she accomplished before seeding. She may have grown daughters to help her or her strength may be double yours. Anyway it's your business. The very fact that each woman can manage her affairs to suit herself is one of the nice things about homekeeping.

By looking ahead and scheming ways to master the situation, you can develop a sense of power and accomplishment that is very satisfying. Don't waste time and energy dreading work you hate. Take apart disagreeable jobs and find out why you dislike them. You will discover better ways of getting through work with less wear and tear on your nerves.

In each household there are rush hours that cause a lot of nervous fatigue. One of these is the early morning. Besides the milking, separating and breakfast, there may be children to get ready for school and lunches to pack for the men. If this part of the day leaves you exhausted, see what can be done to ease the load.

Start the night before and make sure each child knows what to wear. This saves questions, arguments and making decisions, all of which increase nervous strain. One mother found she often had to make two or three trips upstairs for things forgotten in the rush. To conserve time and energy she made wall-pockets for holding hankies, mitts, combs or other essential articles.

Check up the methods and equipment you use in packing lunches. Group all the utensils, boxes, paper and food so that you can put things together with the least effort. Have you given the older children an opportunity to help with the lunches? Each child has a right to share in the responsibilities of the family as well as in the privileges.

In some homes it is the rule that the last one in the living-room at night is responsible for tidying up. This takes only a few moments but how it boosts your morale when you come down in the morning to find magazines put away, cushions in place and books packed up ready for school. It gives the day a good start.

Just before dinner is sure to be another busy spot. You can save yourself both physically and mentally by reducing the amount of last-minute preparation. Start setting the table early enough to save rush and confusion. You will enjoy your dinner better and in turn, this will prevent you from becoming irritable later on.

Smart Tactics

Notice when you get the most fatigued during the afternoon. Then make a point of relaxing before you reach the low spot. Don't say you can't until you really try. In industry they found it paid for workers to have short rest-periods before they started to slow down. Not only did the output increase but there were fewer accidents and morale was definitely higher. The more you think about this, the more you will see that it is smart tactics to have a few blank spaces during the day.

And what about the work after supper? By this time you may be ready to fold up, so do all you can to make things easier for yourself. Unless you are going in for a big program of milking it should be possible to cut out separating at night. This is how we do it without reducing the quality of the cream shipped.

After straining the night's milking, we set the containers in tubs of cold water. Next morning while the milking is being done we raise the temperature of the milk to blood heat at the back of the range. The milk from both night and morning is separated at the same time and the separator needs to be done only once a day. We have followed this plan for many years and consistently get "Table" for the cream. To be free of another chore at the end of the day is a great relief.

You will find it a help in reducing nervous strain to lean heavily on brain-savers. Get the notebook habit and carry a small one in your apron pocket. As things occur to you, jot them down. It clears your mind of clutter and prevents you from forgetting really important items.

In the kitchen or some other central place, hang a slate or blackboard on which any member of the family can write messages or lists. It is useful for reminders of meetings, phone calls, lists of chores, and dozens of other items you cannot carry around in your head.

Getting ready for town is less wearing if you take with you lists of supplies and errands to be done. No more

forgetting important instruction. A bag or sack for the mail prevents losses. Such aids play an important part in lessening mental fatigue.

Certain things are definitely bad for morale though you may not realize it at the time. Noise, clatter, shouting, arguments, rush, hubbub, and all kinds of confusion add to the sum total of weariness and tension. Even squeaking hinges and banging doors contribute to nervous exhaustion. Remove such irritations and you will end the day fresher.

Clothing affects morale far more than most people acknowledge. No matter where you are, comfortable, clean, crisp clothing leads to a feeling of well-being. Knowing you look nice does things to you and helps to ward off fatigue.

Some people seem to be endowed with calm, unruffled natures, but most of us have to learn the secret gradually. Only years of experience and mental discipline show how to deal with emergencies smoothly, and to maintain a calm exterior in the face of the unexpected. How you happen to be feeling has important bearing on what you do and say, which is just another reason for building up your morale.

COLOR IN THE KITCHEN

Continued from page 60

clear water, and wipe dry immediately afterwards.

Fresh plaster walls should be brushed with a solution of zinc sulphate—one pound of the inexpensive chemical per gallon of water—to neutralize the free lime in the plaster before painting. Otherwise the lime will attack the oils of the paint and destroy the finish. Apply this solution freely to the walls and allow it at least three days for drying. Brush off the small crystals which appear as the solution dries.

Now you are ready to paint and this is what you have waited for. Thin the paint according to the directions on the can, and apply the paint in a light coat, letting the first one dry thoroughly before applying the next one.

The ceiling should be painted to harmonize with the wall finish. A light color is just the thing for a ceiling, as dark colors give a feeling of weight hanging over your head. A helpful little rule to remember is: the higher the ceiling, the darker the color should be; the lower the ceiling the lighter the color should be.

Floors are another consideration in your color scheme. If you happen to be lucky enough to find some linoleum in the stores this is an attractive and durable floor covering. Paint that is especially made for hard wear can be purchased, and if applied according to directions, will give an excellent surface. Colors for floors should be darker tones of the wall finish, or else some other darker color that will blend in well with the general color scheme. Of course you will want a color that will not show every spot of dirt, as the darker tones are apt to do.

Now for those little extra touches that will finish the kitchen color scheme. Old sugar, flour, and salt tins can be repainted in a bright color, plastic handles in various shades can be bought in the 5 and 10 cent stores, bright tea towels can be made or old ones dyed, colorful aprons can be bought or made from cotton prints, and ever so many other little touches that you might think of to add to your kitchen. Repaint some old kitchen chairs—it's fun.

Curtains are a keynote in your color scheme too. They also must be chosen with care. For a bright, well lighted room curtains may be of a heavier material such as gingham, muslin, chintz, or percale. For a poorly lit room the materials may be sheer to let in the light, and materials such as marquisette, scrim, voile, net, cheesecloth and organdy are recommended.

Dressy Ornaments

Bow ensembles and earrings add bright touches for spring

By ANNA DeBELLE

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TABLETS



In England Now

By **JOAN M. FAWCETT**

Sunday, November 11, 1945. On this day, so full of associations for all the world, I have come across an old Sunday Times pushed away in a cupboard. I was going to light a fire with it but as I sat upon my heels, I began to read. It was an article by Arthur Bryant about Community Centres.

"Such institutions might in the fullness of time," he wrote, "come to fill the place once held by the medieval parish church." There, I felt, was a most terrific challenge to the parish church of today. Why should these community centres not be part of the parish church? The church all over the country has been planning a vast postwar effort to provide the means with which to answer the longing of the returned serviceman for something beyond the physical life of civilian clothes, food and amusements. Should not these two movements: the one the forward movement of the church; the other the plan for community centres, the necessity for which is recognized by the minister of education, become one great movement for the betterment of us all?

If the returning service man and woman want a chance to render service to the community and play some part in shaping its affairs, they could hardly find a better place to start their service or to learn about the needs of their own community than by taking part in the affairs of their parish church. For the parochial church council, in spite of much apathy in many places, still touches the lives of the parishioners intimately; the ill and the needy, the children and their upbringing, the bereaved, the unfortunate, and the young and happy in their recreations. It does, and could do more, to guide the people's lives from birth to death. This can be realized more fully when we read in the papers how very often in devastated Europe the only authority left to keep some form of order in a district was the church.

The medieval church was intensely alive in this way and was not solely the place for Sunday services. It was the centre of everyday life, combining, to quote an article by Elizabeth McAllister, editor of "Town and Country Planning," "the functions of the modern town hall, the hospital, the dance hall, the community centre, the bank and pawnshop, as well as the Rotary Club and the Chamber of Commerce." And I can add from my own experience that no people would be more thankful to welcome the returned service man and woman, and to benefit from their youth and fresh vigor, than the present members of the parochial church councils.

Would not this be the answer to the cultural urge too? For centuries, until the Puritan movement stamped it out, the church was the cultural centre of the people. Might it not be so again? Here the people heard fine music, saw the beauty of architecture and painting and of lovely materials, and read some of the greatest literature.

I believe that by joining and sharing in the Christian life of the parish church, the demobilized man and woman would find the answer to his desire to play a part in the making of a better world. Here is the germ of institutional life at its best still struggling, ready to spring into life with the least encouragement. No question of class or political party enters into it and the problem of denominational differences could surely be overcome. There is a great searching of soul and a great questioning among many service people; while carrying out their self-appointed service to the community they might find they had come upon the answer.

The ministry of education has laid

down that the management of the centres must be local and democratic. There could be hardly anyone more local, in habit and in interest if not in birth, than the parish priest or clergyman and nothing more democratic than a council drawn from among the people of a parish. All our bishops are stressing upon the civilian population that they must welcome and assist the returning service man, and no doubt too he will feel that he wants to assist us to understand the broader view of life that he has learned to know.

Accommodation for the centres will be one of the problems and here too the church has the answer in the shape of the church halls. Most churches possess one and even if it was not large enough to house the community centre permanently it would be somewhere to start. For with the enormous building there must be of houses and schools and the shortage of labor and material it looks as if it will be a long time before any other premises can be built.

As the centre grew in membership and self confidence and felt a need for more space for the self-development of its people it could use the skill of its own craftsmen to enlarge its premises with local materials. For in the worthwhile use of their craft lies great peace and satisfaction for a craftsman. This has been very evident in the work the men in the forces have done for the fitting up of their camps, and in the things they have made when in hospital or convalescent home and sent back to their people. As another outlet for their services the church itself could come under the care of the community. After all it belongs to the parish and so it should be the pride of the parish to keep it up. Many of our churches in England, particularly village churches, are in urgent need of repairing and refurnishing. Here could be a great satisfaction of the human desire to create beauty for a supernatural cause. It has been done before by our ancestors; a great part of the fabric and furnishings of our ancient churches was the work of local craftsmen, and there is no reason to suppose that we could not do as well and by so doing create a warm, living atmosphere in our churches that would attract people—even the most skeptical.

Music is a natural part of our makeup; all children sing and everyone is touched by it in some form. In the church there could be a focal point and outlet for the singing and playing of the community. The church has always been a patron of fine music, a large part of the best music was originally written for the church but is now not often heard outside a concert hall or the BBC programs. And nothing trains one's appreciation of music, or of any art, so much as the endeavor to be a participant in that art. It would be an education and a joy to belong to a community centre that even inaccurately at first, plunged into the glories of the great masters.

This centre founded upon the enormous fact of Christianity and imbued with the love that Christianity demands of us for our fellow men, and implicating by its scope the universality and skill of humanity, would be a vigorous counter attraction for the young people to the cinema, with its warped moral standards and its encouragement of the negative ability to sit still and watch someone else thinking and doing. What we want to encourage is the will of people to live at first hand, as they do so gallantly in war, not at second hand as they tend to do in time of peace; to make them contribute to the sum of community life as well as to take from it; to spur them on to give of their best.

Safeguard Good Looks

To overcome cold weather hazards preventive and corrective methods should be used—By Loretta Miller



Foundation applied with moist sponge gives smoothness to the complexion.

SPEAKING of beauty, February is a month to be reckoned with. Cold winds encourage chapped skin, dryness, and roughness. Cold weather often makes the scalp tender so that a change of hair arrangement is impossible. Hands get red and rough, legs are irritated by the swishing of skirts against them, and even the lips may chap, crack and feel dry. But with all things, an ounce of prevention, or if too late, a little treatment in the right direction will prevent or overcome even the worst winter time beauty disorder.

Chapped skin of hands, face and lips is probably the most common of all disturbances during cold weather. For the skin which has so far kept its smoothness, it might be wise to use a little precaution. Washing with soap and water immediately before going out of doors is not generally a good idea. Some skins can stand it and others rebel. However, if it must be done, the skin should be dried well. Then a little camphor ice, or a menthol cream, will do much to protect the skin against chapping.

The very sensitive facial skin may require a little more protection. Perhaps a thin spread of a good lubricating cream will be best for the facial skin, though the camphor ice is generally preferred for hands and arms, and even legs that may chap.

Special pomades for the lips have a soothing base that prevents and corrects chapped, rough lips. Such a chapped lip stick should be used before going out of doors and, if the lips are already chapped, before going to bed, and as often as necessary during the day. It also is well to make a light application of pomade before putting on the colorful lip makeup.

The various chapped skin lotions may serve a double purpose during cold weather. For the unusually dry skin, try using one of the good hand lotions as a skin cleanser. Pour a little of the lotion into the palm of one hand, then literally wash your face with it. Wipe off excess lotion and repeat the face-washing. Use a soft cloth for wiping off the lotion. When the skin is well cleansed, make a light application of the lotion and let it stay on. When lotion cleansing is used before going out, remove the final application and apply the usual makeup. The light film of lotion which remains on will serve as a protective covering for the skin.

For hands which have already been chapped, and which are red, rough and

unattractive, concentrated treatment for a few nights will turn the trick: The routine should be applied at night just before going to bed. Scrub the hands lightly, rinse off all soap, and dry thoroughly. Then massage over them a generous application of your favorite chapped skin lotion. Be sure to massage, not merely apply the corrective. Finally, just before turning out the light, put on a lot of camphor ice and massage it well into the hands. Then slip well-greased hands into a pair of old cotton gloves.

If one night's treatment doesn't leave the hands softer and smoother, repeat the same routine each night until the hands return to normal. Be sure to massage the grease well around nails and cuticle. This is a good chance to get in a little nail care, too, especially if they are the victims of cold weather and break, split and tear.

Have you tried to change your hair arrangement lately? Did the new part make your scalp uncomfortably tender? So tender that you had to change back to the old part? Have no fears, it is not your scalp, but the reaction of hair roots to cold weather. If this has been your experience, better change back and wait for warm weather. You'll be able to part your hair as you please then without the slightest opposition.

Flighty, unruly hair may come with icy winds. Daily brushing and a very little brilliantine or hair pomade should be used.

The sudden change from cold out of doors to an overheated house may be responsible for a seasonal skin dryness. If this condition, instead of a dry chapiness troubles you, the solution is simple: it is more and more cream. This type of skin-dryness should be cleansed as soon as it is exposed to the indoors heat, and preferably with a cleansing cream. Although soap and water, the best friend to all types of skin, may be used first, then an application of cream made. It is the unusual type of dry skin that cannot stand soap and water cleansing. The average skin is all the better for this old reliable cleansing. But regardless of the skin or its behavior during the winter, it's well to dry it thoroughly after each washing, especially before going out of doors.

January and February, with their lack of outdoor activity and a lot of sedentary work, may be responsible for those extra pounds or that new roll of excess around the waist. Check and double check on the weight-producing influences during the winter months. Snow-piled roads and sub-zero weather are not encouraging to transportation or travel and leave more time for indoor leisure. Quilting, knitting, crotcheting and the many forms of handiwork may be responsible for broadening hips and heavier waistlines.

Now is the time to check figure faults and to guard against overweight. After a day of inactivity at the club, or home, go through a few exercises before going to bed. Lie flat on your back on the floor and, very slowly raise your legs. Keep the knees rigid as you bring the legs up as high as possible. Repeat ten times the first day, gradually increasing the number until you are repeating the leg-raising twenty-five times. Doing this one exercise twenty-five times each day will counteract the hip-spreading results of one afternoon's sitting. If more sweets, greasy and starchy foods are eaten in the winter, a more expansive exercise routine should be followed if spring is not to find you overweight and oversize. The exercises done should be determined by the individual's needs.

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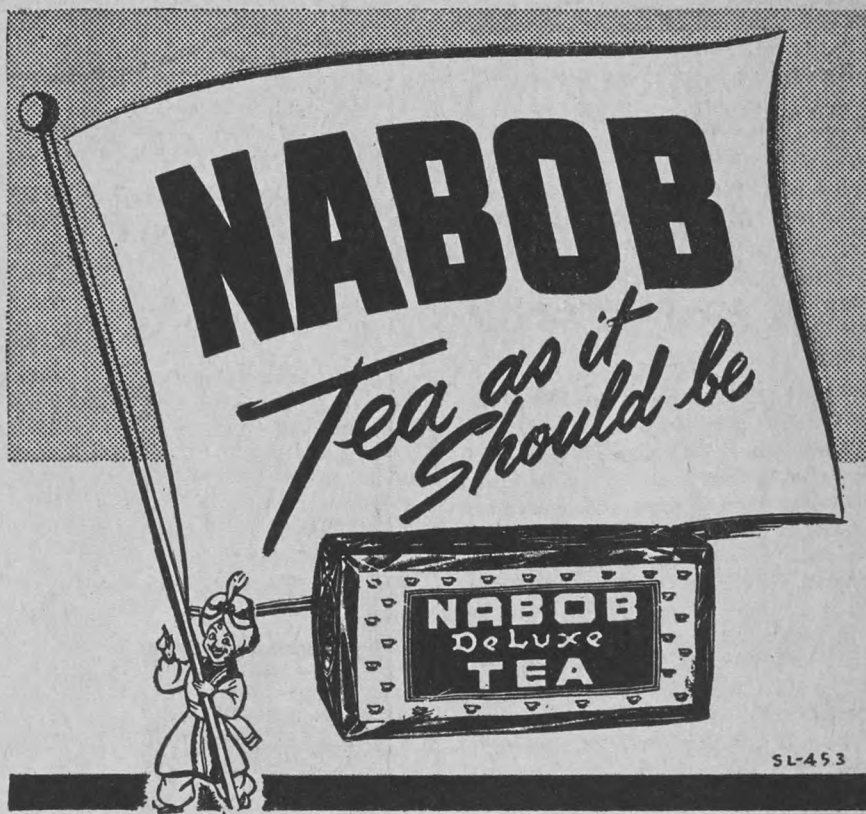
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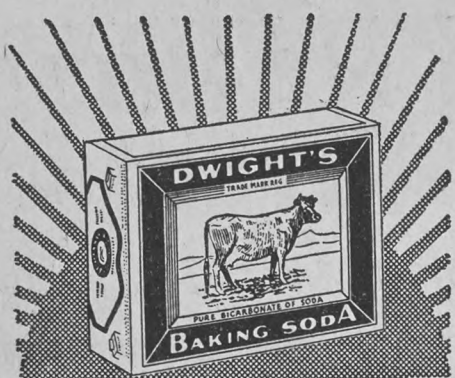
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2951
SIZES
6 MOS., 1,
2, 3, 4 YRS.
TOY DOG
11214

2554
SIZES
1, 2, 3 & 4
YEARS



3029
SIZES
10-40



2582
SIZES
14-46



3054
SIZES
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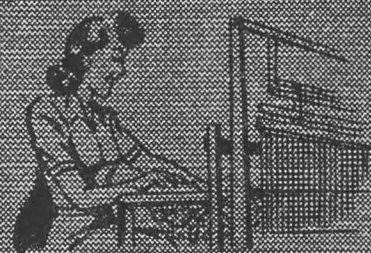
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The Country Boy and Girl

Molly and the Man in the Moon

By MARY E. GRANNAN

MOLLY heard something pounding against the window pane. She ran to the window. There was a storm outside. It wasn't hail . . . it wasn't snow. It wasn't rain. "It's milk," gasped Molly. "Milk." At first she couldn't believe her eyes. But she opened the window and caught some of it in her hand. "It is milk," she said. "It really is milk." And then out of the storm, she heard her name called. "OoooMolly . . . oooooMolly . . . ooo . . . Molly." It was the wind. "Yes?" answered Molly, looking skyward. "What do you want, Mr. Wind?" "Come to me . . . come to me . . . coooooomeeee to meeee," called the wind.

"But how do I go to you?" called Molly. "I don't know how to get there." "I'll blow you to me. I'll blow you hard. Step out into the storm and I'll blow you to me," called the wind in answer.

"All right," said Molly, and she went to the hall cupboard and got on her warmest clothes and stepped out into the storm. With one mighty swoop, the wind picked her up and blew her skyward, up, up, whirling, whirling! She landed at the Gate of the Winds. She went inside, she was laughing, and out of breath as she said to the wind, "Mr. Wind, why did you send for me?"

"Molly," said the wind. "I need you. I want you to see The Man in the Moon. I want you to go to him. He's taken the dippers out of the sky and he won't put them back, and the milk in the Milky Way, is all spilling down over the earth people. They'll be drowned unless the Man in the Moon returns those dippers."

Molly was very much upset. "But what can I do? Why did he take the dippers?" she said.

"He took them to mix a birthday pudding for his birthday and he had nothing to mix it in. He likes you Molly, and you know about puddings, so will you please talk to him."

Molly went to the Moon Man. He was mixing the pudding when she got there, and he was singing. Oh my pudding is a very fine one . . . It will have raisins; it will have cinnamon. It will have sweet spice and nutmeats too.

And I'll put it to bake in the oven. It will bake and bake, it will taste real nice. It will be so sweet, with its sugar and spice.

It will be the finest pudding of all. And I'll eat it all up in the morning.

"Too bad it isn't going to be cooked well," said Molly.

The Moon turned and looked at her, and laughed, "Hello Molly," he said. "And how do you mean that my pudding isn't going to be well cooked. Why this is the finest pudding that was ever mixed."

"That may be," said Molly. "But you need a steamer for a fruit pudding. I know. I know you can't cook them through in a dipper. Mister Moon, I'll tell you what to do. You give me your pudding. I'll take it home with me and cook it for you in my steamer."

"All right," said the Moon Man. "And you put the dippers back in the Milky Way. The dairy maids need them."

And the Moon Man did, and the milk storm stopped, and Molly took the pudding batter and slid home on a moon-beam.

I've been told that it was the finest pudding ever tasted in Moonland. It was the wind who told me. He had some for his supper.

Have You Smart Muscles?

FEW people can have big bulging muscles like Tarzan, and not all of us want them. But we can have smart muscles if we take time to give them a little training.



This bird is sometimes called "Road Trotter" because of its habit of walking (not hopping) on the roads. You can easily distinguish its tracks in the fresh snow by the mark of the long hind claws. Look for its nest on the ground in little cups of grass even before all the snow has gone.

Did the Ground Hog see his shadow on Ground Hog Day? Many people believe that if we watch this grizzled brown little woodchuck on February 2 we can forecast the length of our cold winter weather. On this day, so the story goes, the Ground Hog wakes from his long winter sleep and comes out to look over the weather. If the sun shines so that he can see his shadow he goes back to sleep for the weather will be cold and stormy for at least six weeks. If he does not see his shadow we will have mild weather. What do the people in your district forecast?



Ann Sankey

Big muscles have strength; smart muscles have will-power. The mighty arm bulges of the weight-lifter are often iron-bound and slow in execution. The well trained, nice mannered, smaller muscles permit of graceful speedy action.

Smart people usually have smart muscles, that is, they have muscles that seem to understand what the mind wants them to do and they do just that.

Ever consider how smart your own muscles are? Or did you think all your cleverness was in your head?

Were you doing some thinking on the way to school today? Your leg muscles kept working just the same didn't they? Pretty smart. They knew where you wanted to go and they took you there.

Did you spill some soup over yourself or knock over a glass of water? Not so good!

Watch a clever pianist playing a piano. There you will see well trained, smart finger muscles.

Most of us train our muscles only just enough to get by. We can talk, sure, but the sentences must be easy ones. Try saying quickly any of the good old tongue-twisters such as: A stump once said that a skunk stunk but the skunk said the stump stunk.

Can you write? Well one way maybe. But are your muscles smart enough to be able to write with the "wrong" hand, or to do words backwards?

Stunts will smarten up your muscles a lot. Try doing unusual things once in a while. Here are a few suggestions: Walk around the room balancing a book on your head, see how high you can reach on the wall, see if you can pick up a marble with a teaspoon, see how long you can make a dime spin around, try balancing a ruler on your finger, try putting on your coat or sweater other arm first, imagine you have only one arm and practise eating with that arm alone for a few minutes.

Another good plan to smarten up your muscles is to go in for all sorts of games of skill, especially those requiring good control such as darts, table tennis, croquinole, and ring toss.

But maybe you already have smart, well trained muscles. Think so? Try the tests below and see how many you can pass.

1. Get a full deck of 52 playing cards. Shuffle them well and deal them out into four piles with the 13 cards of one suit in each pile. Less than 40 seconds and you pass the test.

2. Place two dimes on the back of your right hand. Toss them into the air and catch them in the palm of your hand as they come down. Do this three times then repeat with the left hand. If you catch both coins three times out of the six tries you pass.

3. Stand with your eyes closed and your arms down by your sides. Swing your hands slowly in front of you until your fingers meet. To pass the test, you must have your middle fingers touch each other at least five out of ten tries.

4. Place a small piece of paper on a carpet. Stand eight feet away. Throw ten coins so that they settle as close to the paper as possible. Do not roll the coins, toss them flat. If five or more lie within a foot of the bull's-eye (paper) you qualify.

5. Sit at a bare table and close your eyes. Have someone place a coin on the table in front of you well within your reach. Your assistant should tap the table with the coin as he puts it down. Without opening your eyes try to place a finger on the coin, judging its location by the sound. If you come within six inches of the coin on three out of six tries you are better than average.

6. Try the clown trick. This consists of lying flat on your back with an empty ink bottle on the middle of your forehead and rising to standing position without steadying the bottle with your hands. One successful attempt out of three tries is a pass. This is one of the very finest exercises for toning up your muscle control.

Apart from providing you with some handy muscle smartness tests, you will find the above stunts very useful as fun providers at your next party. But be sure you try them yourself first. You will want to show your guests how to do them.—Walter King.

Game of Auctionpak

YOU'LL go daffy over the new game of auctionpak. The greatest party-throwers in the country have writhed and squirmed under the tension as they entertained their friends with this streamlined card game.

Get two complete decks of playing cards; one red, one blue. Shuffle the red deck. Let some one cut. Deal out the top card and place it face down on a nearby table. Then deal out five extra red cards and place them in a separate row, face down.

Pick up the blue deck and explain that you are going to auction off the cards a few at a time to the highest bidders. Offers may range anywhere from one cent to one dollar. No, this is not a gambling game. It is simply a night's fun rearranging petty cash for the purpose of furthering some popular charitable cause. It is a game of skill too because the players must remember the cards played if they have any designs on winning the War Savings Stamps which are offered as prizes. To add spice to the bidding, cards are auctioned singly, in pairs, or in groups of three or four.

"What am I offered for these three magnificent cards? Bid generously folks. You are buying dollars."

The bidding is brisk and exciting. After the entire deck has been auctioned off, the total amount bid for the cards is added up, cash collected from

the bidders, and divided off into prizes. The first prize card taken from the red deck and left face down on the table is covered with the grand prize; War Savings Stamps to the value of fifty per cent of the amount of cash taken. War Stamps equal in value to the balance of the bids are then distributed equally and placed on the five red booby prize cards.

From then on, the pace quickens. You pick up the red deck out of which the prize cards were selected and call the remaining cards one at a time.

"The six of diamonds! Who has it?" The unfortunate holder of the named card which he bought from the blue pack, surrenders it.

This goes on, card by card, until only the prize red cards lying on the table and the duplicate blue cards held by some of the players, remain.

You can now fairly sense the rising tension. The five booby prize cards are turned up and the holders of the corresponding blue cards are awarded the minor prizes.

And then comes the finale—the blue ribbon award. What's that? It goes to the player holding the final blue card? Not yet. The losers still have a chance to hold-out, to play a Bataan. All contestants who had expended their ammunition without so much as drawing a booby prize are given a chance to name that important lone red card still lying face down on the table. If anyone calls it correctly, he gets half its value and the balance goes into the pot. Then there is a new deal and bidding starts all over for a grand prize which will include fifty per cent of the new bids and the carry-over from the previous game.

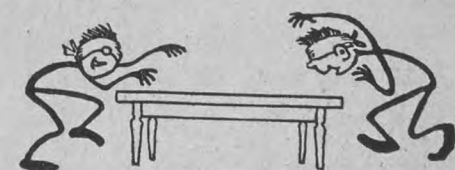
If none of the losers can name the last card, the player holding the duplicate is declared winner.

With a fair amount of concentration and a little bit of luck, you can make this intriguing game worth your while in both dollars and sense.—Walter King.



Mutiny in the Army

THE players are lined up as an "army" facing the "captain." Whatever the captain says to do, they must do exactly the opposite. For instance, the captain says raise your right hand, suiting the action to the word. The "army" all raise their left hands. Each player making a mistake, and doing as he is told, must step out of line. The player who lasts longest wins. This game will make plenty of fun if played fast.—A.T.



Deer Hunting

IN this game there is about as much fun for the lookers-on as for the two who take active parts. These two—the "hunter" and the "deer" are blindfolded and are placed at opposite ends of a big table. At a signal they begin to move around the table as noiselessly as possible. The object of the hunter is to catch the deer, and that of the deer is to avoid being caught; but neither of them is allowed to run out into the room. Players and lookers-on must keep absolutely quiet. If this rule is strictly observed there is more excitement in the game as it is then difficult for one player to know where the other is, and therefore he will not know in which direction to move. When the "deer" is caught, a new couple may be chosen.—A.T.

Ad. Index

Apart from giving Guide readers a ready reference to items advertised in this issue, the coupon below may be used to order literature, samples, etc., offered our readers, by our advertisers. Advertisers offering literature, samples, etc., are numbered at the left and these numbers should be used in the coupon. Where stamps, labels, etc., are required an "X" appears alongside the number. The ad. itself will tell you what to send.

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THE COUNTRY GUIDE, February, 1946
Winnipeg, Man.

From the items numbered I have selected the following in which I am interested in the literature, etc., offered.

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P.O.....

Prov.....

Numbers.....

Please print plainly.



WOULD you mind thanking the contributor to your Children's Page for the design of the bird table. We have one, though ours does not turn around. It faces the West but is sheltered from the west wind by the house. We have had such a lot of enjoyment watching the birds, mostly Mountain Chickadees. There have been Hairy and Downy Woodpeckers, too. Some Bluejays took a look around but it didn't seem to be grand enough to suit them. The Mountain Chickadees remind me very much of the Blue and great Tits of England. One little chap has a crooked foot and he seems to come early and late. He hangs on to fat strung on the trees but if he gets on the ground, to pick up dropped bits, he seems to have trouble taking off. I watch them as I wash and dry the dishes, iron or do other kitchen jobs. I do hope heaven has lots of birds and books and lots of time to enjoy them all.—Mrs. C. L. Hill, Pacific Junction, Man.



BEING always interested in mathematical problems, I took note of the one in a recent issue of The Guide, sent in from Waskada.

"If two combines each cutting 12 feet start in together on a quarter section of grain, which one will cut the most, and how much?"

In actual practice it is not possible for two machines to work together right up to the finish of a field. One would have to pull out to give the other room.

However, it is possible to solve the problem theoretically even if it is slightly complicated by the fact that No. 2 would have to cut a piece of No. 1's first round in order to get into field.

My answer is that No. 1 would cut the most by the amount of 1 acre, 65 square rods, 6 3/4 square yards.

I will give you my method of calculation as briefly as possible.

1. As a unit of measurement the square of the width of cut 16 square yards.

2. There are 110 rounds in the field. Each machine cutting 55 rounds.

3. Each round is 8 units less than the preceding one.

4. The areas of the rounds are therefore in arithmetical progression.

5. There are 876 units in No. 1's first round and 12 in his last.

6. There are 868 units in No. 2's first round and 4 in his last.

7. Now apply the rule for obtaining the sum of an arithmetical progression—that is the sum of the first and last terms multiplied by the number of times and divided by two.

$$8. \text{No. 1 } \frac{888 \times 55}{2} = 24,420 \text{ units.}$$

$$\text{No. 2 } \frac{872 \times 55}{2} = 23,980 \text{ units.}$$

Difference 440 units.

But No. 2 cut one unit off No. 1's first round.

No. 1 would cut one unit off No. 2's first round. Thus they would alternate right up to the centre of the field when No. 2 would have to his credit the one unit that he gained at the initial corner.

So the real difference is 438 units, or 7,008 square yards = 1 acre, 65 square rods, 6 3/4 square yards.

Note that the sum of 24,420 and 23,980 is 48,400—160 acres.—J. L. Brown, Pilot Mound, Man.

PROFESSOR Hayseed, as he signs himself (and he writes a beautiful hand) tells us that he and George had their haying operations stopped by the rain and were going home when both front wheels of the tractor came off. He sat down on one side of the tractor and George on the other to figure it out. "Was it a rain wave that struck us?" he asks. "Whatever you call it we finally figured it out."

"You see, on this make of a tractor the front wheels are smaller than the rear wheels, so naturally they turn faster. Now it happened that the clay from the muddy road stuck to the front tires (the back ones have a self-cleaning tread) until they were almost the same size as the rear wheels. But they were turning faster! So there were the front wheels, skidding and pulling until they finally managed to tear away from the axles and race ahead at their own pace. I wonder how other farmers overcome this difficulty in wet weather. Surely there must be some solution."

MISS Shirley Oliver, who boasts that she is only 14, sent this one in and says she would like to see it in print. Well, Shirley, here it is in print. How does it look?

One day my dad and my two brothers were out cutting sawlogs when they came to a very tall tree. It was so tall that when it was cut it just sat on its stump. It sat right there until dad climbed the tree and unhooked the sky hooks that were holding it up. Even then the tree refused to fall until he had climbed down and hollered "timber."

TALL trees inspire similar stories out in B.C. Alphonse Weigers, of Sinclair Mills, was working for the Eagle Lake Sawmills. One day, while the crew were eating their lunch, the talk turned to the heavy snowfall in that region, when Harry, an old timer remarked, "Yes, we do get a lot of snow here but it's nothing compared with what they get up at Buckley and Stewart. There they get about 50 feet of it in a winter."

"What do they do there in the winter, cut timber?" asked one of the crew.

"Heck, no, they mine," snorted the straw push, Murphy. "If they wanted to cut timber they would have to top the trees in the winter and cut them down in the summer."

At this Harry looked hurt and annoyed. "Huh, that's nuthin," he said. "Down in Idaho the snow was so deep that when we were cutting railroad ties we went out in the winter and cut the tops off the trees. Then, toward spring, when the snow was melting, we went around and cut one tie off each tree and kept right on makin' the rounds and cuttin' one tie at a time till the snow was all gone."



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Practical Books and Bulletins

"A Country Guide Service"

22. Hardy Fruits, by G. F. Chipman—25 cents postpaid.
23. Farm Workshop Guide, edited by R. D. Colquhoun—Illustrations and instructions for gadgets, and practical farm plans—50 cents postpaid (or Free with a \$1.00-for-2-year subscription).
50. The Countrywoman Handbook, Book No. 1—Kitchen Labor Savers, Home Decorating, Pattern Reading, Getting Rid of Flies, Bugs, and Beetles, etc., etc.—25c postpaid.
52. The Countrywoman Handbook, Book No. 3—Nutrition (foods necessary for proper quantities of vitamins, calories, minerals, etc.), Canning Meats and Vegetables, Curing Meats, Drying Vegetables, Storing Vegetables, etc., etc.—25c.
53. Farmer's Handbook on Livestock, Book No. 4—Livestock Nutrition, Livestock Pests and Diseases, etc., etc.—25 cents postpaid.
54. Farmer's Handbook on Soils and Crops, Book No. 5—Types of soils. Erosion control. Weed control. Forage crops, etc., etc.—postpaid 25c.
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2. Care of Hands.
3. Care of the Feet.
4. Treating of Superfluous Hair.
5. Daintiness in Dressing.
6. How to Care for Your Skin.
7. Skin Problems.
8. Take a Facial at Home.
9. Care of the Hair.
10. Hair Problems.
11. How to Use Powder, Rouge, and Lipstick.
12. Mouth Hygiene.
13. Getting Ready for a Permanent.
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